The Complementation of the Verb *Swear* in British English

Sanna Viitala
University of Tampere
School of Language, Translation and Literary Studies
English Language and Literature
Pro Gradu Thesis
March 2015

Tampereen yliopisto

Englannin kieli ja kirjallisuus / maisteriopinnot

Kieli-, käännös- ja kirjallisuustieteiden yksikkö

VIITALA, SANNA: The Complementation of the Verb *Swear* in British English

Pro gradu – tutkielma, iv + 83 sivua

Maaliskuu 2015

Tämä pro gradu – tutkielma käsittelee *swear*-verbin komplementaatiota ja komplementaation muutoksia eri aikakausien brittienglannissa 1700-luvun alusta 1900-luvun loppuun. Tarkoituksena on selvittää *swear*-verbin komplementaation läpikäymät muutokset ja mikä ilmiöön on vaikuttanut.

Tässä tutkielmassa määritellään ensin komplementaation käsite, minkä jälkeen esitellään joitakin kielitieteen periaatteita, jotka voivat vaikuttaa komplementaatioon. Tämän jälkeen tutkielma esittää katsauksen *swear*-verbiin ja sitä käsittelevään aiempaan kirjallisuuteen. Tavoitteena on kartoittaa, millaisen kuvan sanakirjat ja kielioppikirjat antavat verbistä *swear* ja tarkastella miten tätä teoreettista kuvaa autenttinen kielenkäyttö korpuksissa heijastaa. Lisäksi korpuslingvistiikkaa ja joitakin sen peruskäsitteitä esitellään lyhyesti.

Tutkimuksen varsinainen analyysiosuus käyttää apunaan kahta erilaista korpusta. Ensimmäinen korpus on nimeltään Corpus of Late Modern English Texts, johon on kerätty materiaalia vuosilta 1710–1920. Toinen korpus, the British National Corpus, sisältää tekstejä viime vuosisadan lopulta. Tässä tutkielmassa on käytetty materiaalina kahden eri aikakausille sijoittuvan korpuksen dataa tavoitteena saada diakroninen näkemys komplementaatioon.

Tämä tutkimus pyrkii osoittamaan, että verbin merkitys vaikuttaa sen komplementaatioon. Lisäksi tutkimuksesta nousee ilmi, että verbin *swear* komplementaatio on huomattavasti monimutkaisempi kuin kielioppikirjat antavat ymmärtää, sen sijaan sanakirjat vangitsevat verbin vaihtelevan luonteen hyvin. Vaikka diakronisesti lineaarisia muutoksia ei löytynyt, on selviä trendejä kuitenkin havaittavissa. Tällaisiin kuuluvat mm. that-lauseiden esiintyminen yhä useammin ilman *that*-sanaa, *to*-infinitiivien määrän merkittävä laskeminen sekä nk. nollakomplementin osuuden nousu. Tutkimuksen tarkoituksena on myös osoittaa, että erityisesti periaate nimeltä Complexity Principle vaikuttaa merkittävästi verbin komplementteihin.

Asiasanat: komplementaatio, korpus, korpuslingvistiikka, *swear*

Table of contents

1. Introduction

Consider the following authentic examples of language use retrieved from the Corpus of Late Modern English Texts and the British National Corpus:

(a) 'It's not me that goes round swearing at one's betters and pelting down stairs like a looney.' (FNU 987)
(b) "And will you swear that the goods stolen," said the justice, "are worth forty shillings?" (Fielding 1751, *Amelia*)
(c) I have sworn to divide with you to the last shilling. (Moore 1753, *The gamester*)
(d) Sapt swore an oath, half in amusement, half in vexation. (Hope 1898, *Rupert of Hentzau*)

As can be seen in these examples, the verb *swear* not only can be followed by several different constructions but it can also have a variety of meanings. In addition, to an apt language user, these four are assuredly not the only options for meanings and constructions that occur with *swear*. The aim of this master's thesis is to map the usage of *swear* from the point of view of complementation. Complementation as a phenomenon deals with the kinds of grammatical constructions that can or must follow given verbs, nouns or adjectives. In this thesis, the complementation of the verb *swear* is investigated from a diachronic perspective also taking into account the different meanings or senses of the verb. The aim is to see how, if at all, the complementation of *swear* has changed in the past three centuries, and whether the complementation pattern is dependent on the varying meanings of the verb.

The first part of this thesis presents previous literature on *swear*, with the purpose of understanding the senses of the verb and the analyses other writers have made concerning the verb. Secondly, I will acquaint my readers with a theoretical background for the study by first introducing complementation as a phenomenon. I will also point out the possible challenges in recognizing complements. In the first part, I will consider some principles that may have an effect on complementation. The relevance of these principles will be studied specifically from the point of view of this project on the verb *swear*. Thirdly, the field of corpus linguistics will be briefly introduced and

the relevant corpora will be discussed. I will also present one practical matter as regards investigating a corpus.

The second part of the thesis will look at actual data on language use. To achieve a diachronic dimension, two different corpora, the Corpus of Late Modern English Texts and the British National Corpus, have been consulted for this thesis. In this part, the occurrence of different complements at different periods of time and their possible dependence on the senses will be discussed. Finally, the possible effects of the principles bearing on complementation will be considered in relation to the data.

This kind of a project has only recently become viable by the appearance of electronic corpora. Investigating dozens of books and finding a relevant verb from thousands of pages, hundreds of thousands of words would have been a tedious task without electronic help. Now that this is type of project is possible, it can be of assistance to language learners. Learning many individual words can be tiresome. Linking constructions to their head verbs, such as *swear*, by understanding the complementation phenomenon, will allow a language learner to see language as longer constituents. Thus the need for learning vocabulary by heart will be replaced by a deeper understanding of which words always go together, so to speak.

In addition to helping language learners, this thesis may shed light on language change in general. This project may show changes in language use which reflect the current tendencies of English. Any changes I find can be positioned within a larger field of complementation studies, which have sought to find regularities in the ways that English language has changed and is changing. With these points in mind, complementation can be considered an interesting area of studies and an exciting topic for a thesis.

2. The verb *swear* in previous literature

The present chapter deals with what has previously been written about *swear*. The first look will be made into some of the most prominent dictionaries of English. The idea is to see the different senses assigned to the verb and the different complements mentioned by the dictionaries. Another aim is to see whether the complements listed are sense-specific. While the term complementation will be more specifically defined in chapter 3, for now it suffices to understand that complements are constituents which follow the head verb, in this thesis *swear*. Finally, a framework of senses specifically designed for the purpose of this thesis will be introduced.

The second source of reference will be provided by grammar books, with the intention of getting an overview of the complements that grammarians consider available for *swear*. It will also be of interest to see whether the grammars consider sense in their analysis of complementation patterns of *swear*.

2.1 Dictionaries on *swear*

In this section, three dictionaries will be investigated, namely the *Oxford English Dictionary*, the *Oxford Advanced Learner's Dictionary* and the *Collins Cobuild Advanced Learner's Dictionary*. The *Oxford English Dictionary* (henceforth the *OED*) gives *swear* numerous senses and complements, as can be seen in Table 2.1. An example of each sense is given in the middle column and the complements as I have analysed them based on the *OED* can be found in the right column. The senses listed as obsolete have not been included in this list.

Table 2.1 The senses and complements thereof of *swear* according to the *OED*.

Sense	**Example**	**Compl.**
1) *intr.* To make a solemn declaration or statement with an appeal to God or a superhuman being, or to some sacred object, in confirmation of what is said; to take an oath.	1815 SCOTT *Guy Mannering II* 'As a magistrate,..if you refuse to answer my questions, I must put you upon your oath.' 'Troth, sir, I am no free to swear.'	Ø
2a) *intr*. To promise or undertake something by an oath; to take an oath by way of a solemn promise or undertaking.	1902 V. JACOB *Sheep-stealers* 'Swear, I tell ye.' 'I swear it, so help me God.	Ø
2b) with inf.	1867 W.D.HOWELLS *Ital. Journeys* At last we leave the gates, and swear each other to come again many times while in Naples.	*to* inf.
2c) with clause	1813 SCOTT *Rokeby IV* Rokeby sware, No rebel's son should wed his heir.	*that* cl.
2d) *trans*. With pron. as obj.	1869 E.A.FREEMAN *Hist.Norman Conquest III* Harold then..swore, but what he swore is as uncertain as it is when and where he swore it.	NP
3) *trans*. with certain ns. To promise or undertake an oath to observe or perform (something).		
a) fidelity, allegiance, etc.	1848 THACKERAY *Vanity Fair* While the French nation and army were swearing fidelity round the eagles in the Champ de Mai.	NP
b) an action that is to be accomplished.	1592 *Arden of Feversham* The villaine hath sworne the slaughter of his maister.	NP
c) conditions, an agreement.	1757 W.WILKIE *Epigoniad* VI A Truce we swore.	NP
4) To affirm, assert, or declare something by an oath; to make oath to the truth of a statement.		
a) (a) *intr. spec*. To give evidence on oath (against a person.) Now rare.	1810 G.CRABBE *Borough* --that old Man will swear Against my Life;--	Ø
a) (b) With *home* or hyperbolical expressions, as *through a two-inch board*; also **to swear one's way through**… : denoting hard swearing.	1864 DICKENS *Our Mutual Friend* That severe exertion which is known in legal circles as swearing your way through a stone wall.	NP (gen.) *way through*
b) with clause (or equivalent obj. and compl. or accus. and inf.): often also, to affirm emphatically or confidently (without an oath).	1866 TROLLOPE *Belton Estate I* He swore to himself that he did love her.	*to* + NP + *that* cl.
c) *trans.* with pron. as obj.	1818 SCOTT *Heart of Mid-Lothian* Her father..tormented himself with imagining what the one sister might say or swear.	NP
5) *trans.* With certain ns.:		
a) To an oath as to the fact or truth of; to confirm (a statement) by oath.	1755 JOHNSON *Dict.Eng.Lang.* He swore treason against his friend.	NP

b) To proclaim or declare with an oath or solemn affirmation.	1709 J.STRYPE *Ann.Reformation* That they should swear his supremacy, and obedience to him before some priest.	NP
c) To value on oath *at* so much.	1896 *Law Times* The gross personal estate is sworn at £37,405.	NP + *at* + NP
6) To take or utter (an oath), either solemnly or profanely.	1823 SCOTT *Quentin Durward III* Never was false oath sworn on this most sacred relique, but it was avenged within the year.	NP, *on* +NP
7) *obs.*		
8a) *intr.* To utter a form of oath lightly or irreverently, as a mere intensive, or an expression of anger, vexation, or other strong feeling; to use the Divine or other sacred name, or some phrase implying it, profanely in affirmation or imprecation; to utter a profane oath, or use profane language habitually; more widely, to use bad language.	1841 THACKERAY *Great Hoggarty Diamond* O, sir, it would have frightened you to hear a Christian babe swear as he did.	Ø
b) **to swear pink** (*colloq.*): to make vehement protestations; to 'swear blind'.	1956 E.POUND tr. *Women of Trachis* And you swore pink they were bringing her to be Heracles' wife.	Ø
c) To utter a harsh guttural sound, as an angry cat or other animal.	1896 F.GALTON *Spectator* When Phyllis was a kitten she had wild fits, tearing round the room and 'swearing' horribly.	Ø
9) *trans.*		
a) To bring or get into some specified condition or position by swearing.	1817 SCOTT *Rob Roy* The miller swore himself as black as night that he stopt them at twelve o'clock.	*that* cl.
b) To put *upon* or ascribe *to* a person in a sworn statement.	1900 S.J.WEYMAN *Sophia* A silver tankard and twenty-seven guineas she took with her, and I'll swear them to you.	NP + *to* + NP
10a) Orig. *Pass.* To be bound by oath; hence *actively,* to cause to take an oath; to bind by an oath; to put (a person) upon his oath; to administer an oath to.	1912 *Times* A member of a French Roman Catholic Sisterhood objected to be sworn on the Testament.	NP, *on* +NP
b) *Obs.*		
c) Const. *To* a person (i.e. in allegiance or service), a rule, a course of action, a declaration, etc. Similarly const. *Against.* Now chiefly in **to swear to secrecy.**	1852 THACKERAY *Henry Esmond I* He swore Harry to secrecy, too, which vow the lad religiously kept.	NP *to* NP
d) with inf.	1805 H.T.COLEBROOKE *Védas* The priest swears the soldier by a most solemn oath, not to injure him.	NP, *to* inf.
e) Obs.		
f) Phr. **I dare be sworn, I'll be sworn**, expressing strong affirmation, properly implying readiness to take an oath upon the fact.	1835 E.BULMER-LYTTON *Rienzi* I dare be sworn the good man spent the whole night in painting himself.	

11) *spec.*		
a) To admit to an office or function by administering a formal oath.	1880 M.E.BRADDON *Just as I Am* The jury were sworn.	NP
b) with. compl., Usually expressing the office or function to which the person is appointed.	1855 T.B. MACCAULAY *Hist.Eng. III* Richard..had been sworn of the Irish Privy Council.	NP

Some of these senses include yet further, mainly descriptive, meanings. One such example is mentioned by the *OED* in sense (8c), "to utter a harsh guttural sound like an angry cat or other animal". The example is from 1902 from *Strand Magazine*: "Away to the east an angry [locomotive] engine was swearing". It can also be noted that sense (10c) with its complement (NP+ *to* +NP) occurs increasingly often only in the idiom *swear somebody to secrecy*.

The *Oxford English Dictionary* also lists 5 phrasal and 7 prepositional combinations of the verb *swear*. Phrasal verbs will not be dealt with in this thesis, and possible tokens of those will be excluded from the data. Of the 7 prepositional verbs listed in the dictionary 2 have been excluded based on the *OED*'s analysis of these as either obsolete or rare. (As the *OED* appears to list any token obsolete if it has not occurred in language use since the 17th century, it can be concluded that no such tokens are relevant in this thesis, the historical scope of which dates back to 1710, at the earliest.) Thus, five prepositional verbs with current use from the *OED* will be dealt with in this thesis. Table 2.2 lists the prepositional verbs and their meanings together with examples of their use provided by the *OED*.

Table 2.2 The prepositional formations of *swear*.

Prep. verb	**Senses**	**Example**
to swear at	1) To imprecate evil upon by an oath; to address with profane imprecation; *gen*. to utter maledictions against; to curse.	1863 'E.WETHERELL' *Old Helmet* He swore at them for the stupidest entertainment man ever pleased himself with.
	2) *fig.* Of colours, etc.: To be violently incongruous or inharmonious with. *Colloq.*	1884 *Daily News* Two tints that swear at each other.
to swear by	1) To appeal to, or use a formula of appeal to (a divine being or sacred object, or something affectedly or trivially substituted therefor) in swearing; to say 'by...' as a form of oath.	1877 TENNYSON *Harold* The strange Saints By whom thou swarest.
	2) To swear to or be sure of the existence of: in phr. **enough to swear by**, expressing a very slight amount. c*olloq.* or *slang.*	1884 'H.COLLINGWOOD' *Under Meteor Flag* The two ships touched with a shock which was barely perceptible, just enough in fact to 'swear by', as the gunner remarked.
	3) To accept as an infallible authority; to have absolute confidence in. c*olloq.*	1890 G.A.HENTY *With Lee in Virginia* We have a first-rate fellow in command of the cavalry.. His fellows swear by him.
to swear off	To abjure, forswear, renounce	1898 A.F.LEACH *Beverley Act Bk.* Ingelram keeps a concubine… Confesses and swears off her.
to swear on or *upon*	To take an oath, symbolically touching or placing the hand on (a sacred object)	1821 J.BAILLIE *Ld. John* Were I on my father's sword to swear.
to swear to	1) *rare*	-
	2) To affirm with an oath; to express assurance of the truth of (a statement), or the identity of (a person or a thing), by swearing.	1908 R.BAGOT *Anthony Cuthbert* You could swear to its authenticity, or the reverse, if necessary?

The prepositional verbs have similar senses as the ones listed in Table 2.1; the preposition can be seen as adding something to the sense. For example, sense (8a) and prepositional verb headed by *at* are very similar in meaning, i.e. ‘using bad language’, and the preposition *at* adds only a “recipient” to the action (not considering the figurative meaning also possible for *swear at*).

In addition to that, as table 2.1 reveals, the variety of complements of *swear* is large: there are non-sentential complements such as noun phrases (NPs) and prepositional phrases (PPs), but also sentential complements like *that* clauses and *to* infinitives. Additionally, the sense of the verb *swear*

is much more complex than one might intuitively think. Combined with the prepositional meanings, *swear* is indeed a multifaceted verb. Therefore, in this thesis, many cases listed by the *OED* and the prepositional verbs will be combined under fewer senses with the help of other dictionaries. How this will be done is explained before the final division into senses is given in table 2.5.

First, let us consider further reasons for combining the prepositional senses with non-prepositional senses. One reason is provided by the analysis in the *Oxford Advanced Learner's Dictionary* (henceforth the *OALD*), in which the prepositional verbs have been combined with similar, non-prepositional senses. Table 2.3 presents the senses given by the *OALD* together with examples. Possible complements for each sense are also given.

Table 2.3 *Swear* according to the *Oxford Advanced Learner's Dictionary*

Senses	**Examples**	**Complements**
1) To use rude or offensive language, usually because you are angry. Idiom 'to swear like a trooper'	She fell over and swore loudly. Why did you let him swear at you like that?	Ø, *at* + NP
2) To make a serious promise to do sth	He swore revenge on the man who had killed his father. I swear (that) I'll never leave you. She made him swear not to tell anyone.	NP, *that* clause, *to*-infinitive
3) To promise that you are telling the truth	She swore (that) she'd never seen him before. I swear to God I had nothing to do with it.	*that* clause, *to* someone, *on* something
4) To make a public or official promise	Witnesses were required to swear on the Bible. Are you willing to stand up in court and swear (that) you don't recognise him? Remember, you have sworn to tell the truth.	NP, *on* something, *that* clause, *to* infinitive
5) To swear sb to secrecy/silence; to make sb promise; not to tell sth to anyone	Everyone was sworn to secrecy about what had happened.	someone + *to* + *secrecy*

Combining prepositional meanings under the main senses is also the way chosen by the *Collins Cobuild Advanced Learner's Dictionary* (henceforth the *CCALD)*. Table 2.4 presents their view of *swear.*

Table 2.4 *Swear* according to the *Collins Cobuild Advanced Learner's Dictionary*

Sense *CCALD*	**Examples**	**Complements**
1) If someone swears, they use language that is considered to be rude or offensive, usually because they are angry.	It is wrong to swear and shout. They swore at them and ran off.	Ø, *at* + *NP*
2) If you swear to do something, you promise in a serious way that you will do it.	Alan swore that he would do everything in his power to help us. We have sworn to fight cruelty wherever we find it. The police are the only civil servants to have to swear allegiance to the Crown. I have sworn an oath to defend her.	*that* clause, *to* infinitive, NP
3) If you say that you swear that something is true or that you can swear to it, you are saying very firmly that it is true.	I swear I've told you all I know. I swear on all I hold dear that I had nothing to do with this. Behind them was a confusion of noise, perhaps even a shot, but he couldn't swear to it.	*that* clause, *on/by* + NP + *that* clause, *to* + NP
4) If someone is sworn to secrecy or is sworn to silence, they promise another person that they will not reveal a secret.	She was bursting to announce the news but was sworn to secrecy.	usually passive, *be* V-ed *to* NP

The analyses in both the *OALD* and the *CCALD* are fairly similar. Considering the complexity of table 2.1 and the aim to analyse complementation patterns within the framework of sense, the analyses in these two dictionaries, (see tables 2.3 and 2.4) will be used as a starting point for the final division into senses.

Sense (1) and sense (2) in the *OALD* and the *CCALD* coincide completely. The *OALD* sense (5) and the *CCALD* sense (4) do so, too. Further, the *OALD* senses (3) and (4) are very similar in sense with the main difference being the addition of official surroundings in the latter sense. However, any promise made, be it a promise to tell the truth (*OALD* and *CCALD* sense (3)) or a promise to do something (*OALD* and *CCALD* sense (2)), can be made in official circumstances. I have chosen to disregard this addition. Thus, I have arrived at four main senses. Next, the various meanings from the

OED will be combined under these groups with one addition. Number (11) in the *OED* will be added as the fifth sense, making the final number of senses 5. Thus, the final division into senses will be a combination of tables 2.1, 2.3, and 2.4 with the prepositional "extras" from table 2.2 included.

As mentioned above, the reason for combining the senses in the *OED* is simplicity. The combining of the *OED* senses under the *OALD* and *CCALD* frameworks is done based on similarities in meaning. Senses (6) and (8a) in the *OED* have to do with uttering oaths profanely and lightly, often in anger, and are combined under *OALD/CCALD* sense (1), "using rude language". The *OED* senses (2), (3), (8b), and (10d) are combined with the *OALD/CCALD* sense (2), as their meaning falls under the idea of promising to do or observe something. Further, the *OED* senses (1), (4), (5), and (10a) each have the meaning of promising that something is true, and are dealt with *OALD/CCALD* sense (3). Sense (4) in this thesis is a combination of *OALD* sense (5), *CCALD* sense (4) and *OED* sense (10c). The fifth sense is the sense (11) of the *OED* i.e. admitting somebody to office by swearing.

As mentioned earlier, the prepositional senses headed by *at, by, off, on* and *to* (as in Table 2.2) will be analysed under the same sense framework. I have chosen to do so as there is clear overlap between the senses with and without prepositions, further, this has also been the principle in use in the other two dictionaries. For example, sense (1) can occur with zero complement but also with [--- *at* +NP] complement (see tables 2.3 and 2.4).

Swear at is cursing and will naturally be analysed under sense (1). The second meaning of *swear at* is figurative but its sense is fundamentally the same. The analysis of the corpus data will show if this figurative use occurs. *Swear off* is a promise to stop doing something or to give something up and thus it will be analysed as a specific case under sense (2). *Swear* with the preposition *to* attests to the truth value of a statement and it is thus considered sense (3). However, *to* + NP can also denote the recipient of the communicative action as such it can occur with both sense (2) and (3). The analysis will show which of these uses is more common. The prepositional complements headed by *by* and *on* can often precede other complements, such as *that* clauses, as their function is to add extra strength

to the oath sworn (see table 2.4, point 3). As both senses are essentially promises of something, I consider these prepositions possible for both senses (2) and (3). While the dictionaries only mention this possibility together with sense (3), promising that what you say is true, there is really no reason why it could not be possible also with sense (2), promising to do something.

Table 2.5 shows the final division into senses with the numbers of *OED* senses indicating how they have been combined. The table also includes the complements for each sense as listed by the *OED*, the *OALD* and the *CCALD*. Thus, the final division into senses is as follows:

Table 2.5 The final division into senses used in this thesis.

	OED	**Senses**	**Example**	**Complements**
1	6,8	To use rude or offensive language, usually because you are angry	1841 THACKERAY Great Hoggarty Diamond O, sir, it would have frightened you to hear a Christian babe swear as he did.	Ø, *at* + NP
2	2, 3, 8b,10d	To make a serious promise to do sth, to promise to observe or perform	1813 SCOTT *Rokeby IV* Rokeby sware, No rebel's son should wed his heir.	Ø, NP, *off* + NP, *that* clause, *to* infinitive
3	1, 4, 5, 10a, f	To promise that you are telling the truth	1866 TROLLOPE *Belton Estate I* He swore to himself that he did love her.	Ø, NP, *by* + NP, *on* + NP, *to* + NP, *that*-clause
4	10c	To swear sb to secrecy; to make sb promise not to tell sth to anyone	1852 THACKERAY *Henry Esmond I* He swore Harry to secrecy, too, which vow the lad religiously kept.	NP + *to* + NP (*secrecy*)
5	11	To admit to an office or function by administering a formal oath	1880 M.E.BRADDON *Just as I Am* The jury were sworn.	Ø, NP

The only minor complication here is the threefold meaning of *swear by.* According to the *OED* (see table 2.2), it can either mean "to appeal to something sacred", "to be sure of the existence of something" or "to accept as an infallible authority". I expect to find in mainly in the first meaning, with the same intensifying function that *on* has when complementing *swear*. The analysis will show if my hypothesis is valid.

2.2. Grammars on *swear*

This section examines several grammars which also deal with the complementation of verbs. Quirk et al. (1985, 1179) list *swear* under verbs that take a finite *that* clause as their complement. They (ibid.) also mention the possibility of omitting the *that* complementizer altogether. In the same work Quirk et al. (1985, 1181) list verbs with *that* clause complements with a further mention of those verbs that can also be followed by a *to* infinitive. This list does not mention *swear* at all.

Huddleston and Pullum (2002) also list verbs according to their complementation patterns. They (2002, 959) mention the *that* clause complement for *swear* and note how it can be preceded by an optional prepositional phrase as the first complement. This PP denotes the recipient of the communicative act and takes the form [--- *to* + NP]. Unlike Quirk et al. (1985) Huddleston and Pullum (2002, 1227) include *swear* under verbs that take *to* infinitival complements.

Poutsma (1904), too, illustrates *swear* with both *that* clause and *to* infinitive complements. Poutsma's grammar focuses on differences between English and Dutch and mentions that English verbs of judging or declaring rarely take infinitival complements (1904, 537-8) but according to him (1904, 540) such complements are "now and then met", for example with *swear*. Poutsma's analysis (1904, 174) also includes *that* clauses with optional PPs denoting the person or the thing to whom or to which the oath is sworn. Here are Poutsma's examples of the two complement patterns:

(1) I <u>swore never to divulge</u> our secret (Poutsma 1904, 540).
(2) I <u>swear to you that I have</u> (Poutsma 1904, 174).

Biber et al. (1999, 665) list *that* clauses as complements of *swear* and they, too, mention the PP denoting the recipient as a possible optional complement preceding *that* clauses.

There seems to be a strong consensus among the grammarians referred to of the *that* clause as a complement for *swear*, while the agreement on *to* infinitives is not quite that clear. The optional PP complement is also mentioned by several of these grammarians. Thus, the overall picture of the

complementation of *swear* as analysed by grammarians is much less complicated than that of the dictionaries, including only sentential complements.

The non-sentential complements, such NPs and PPs are not listed as possible complements by any of the grammars, while all dictionaries (*OED*, *OALD,* and *CCALD*) did do so. Neither was the possibility of *swear* occurring without any complements mentioned, although the *OED* considers it possible for senses (1), (2) and (3), in the sense framework used for this thesis. Moreover, unlike the dictionaries, none of the grammars take sense into account in their complement analysis. This is fairly surprising considering the variety of meanings the verb can have. Especially, sense (1), "to use rude language", is in meaning quite far away from the other senses, which revolve around truth and promises. Thus, one would expect the complementation of these senses to be a matter of interest to grammarians, too.

Moving on to chapter 3 on complementation as a grammatical phenomenon, the lexical object of this study has revealed a complicated nature with a myriad of senses and complements.

3. Complementation

This chapter deals with the concept of complementation. It is noteworthy that while complementation as a phenomenon is also linked to nouns and adjectives, this thesis speaks only of verbs, as the object of this study is a verb. After the basics of complementation have been discussed, a subsection about the difficulties of knowing what are and are not complements follows.

Verbs and complements are central elements of what is called Valency Theory (Herbst 2004, xxiv). According to Herbst (ibid.) verbs have a central status in Valency Theory as they determine the number and form of the constituents they require to create grammatically correct sentences. Different verbs have different requirements when the number and form of their complements is concerned. Thus the verb's *valency* is the number of complements it takes (Herbst 2000, xxiv).

How can one determine the number and the form of required complements so as to form grammatically correct sentences? According to Huang (1997, 68), speakers have knowledge in their mental lexicons about several issues concerning different lexical items, and one such issue is complements. This means that speakers unconsciously understand what can or must follow verbs i.e. which type of complement they require. The term used by Huang (ibid.) is *Category-selection* or *C-selection*, which refers to the selection made by verbs as to their objects or complements. Thus two verbs that have a similar meaning can C-select different complements, as in Huang's (2007, 68) examples:

(1) a) Anteaters resided in Southern California.
b) * Anteaters resided Southern California.
(2) a) Anteaters inhabited Southern California.
b) * Anteaters inhabited in Southern California.

The point to be made here is that while *reside* and *inhabit* are near-synonyms, the former must be followed by a prepositional phrase while the latter must take a noun phrase complement to create grammatically correct sentences. If the complements for these two verbs are reversed, the resulting sentences are incorrect English.

C-selection, or verbs' selection of their complements, is called *licensing* by Huddleston and Pullum (2002). They (2002, 219) refer to it as "the most important property of complements". Complements can only occur if they are preceded by a verb that licences them, which implies dependence between complements and their heads. In other words, only the existence of a given type of a head (i.e. verb) can lead to the existence of its complement. This connection is also called *subcategorisation* (Huddleston and Pullum 2002, 219). Patterns of subcategorisation are called subcategorisation frames, such as: *meet*: V, [---NP], which means that the verb *meet* subcategorizes for an NP (Haegeman 1991, 34). In Huang's (1997, 68) terms *meet* C-selects an NP. At the most practical level this means that *meet* must be followed by a noun phrase to form grammatical sentences.

Thus, a verb's valency, C-selection, licencing and subcategorization deal with the number of constituents which must follow the verb in order to create grammatically correct sentences. However, there is one constituent which precedes the verb, i.e. the subject. Haegeman (1991, 36) discusses the argument structure of verbs and mentions that the arguments of a verb are the "participants minimally involved in the activity or state expressed by the predicate". This means the minimum number of constituents which is required to form good sentences. For example, intransitive verbs, or verbs which take no object, are called *one-place predicates* (Haegeman 1991, 35) and the one place these predicates need filled is the subject position. To Haegeman (ibid., 37) it is important to understand that the argument structure and the subcategorization frame of a verb are two different things: the subcategorization only deals with the constituents which must follow the verb while argument structure also includes the subject. Subcategorization frames only specify the complement patterns of different verbs but subjects are obligatory for all verbs, hence, subjects are not complements in Haegeman's analysis (1991, 37).

Huddleston and Pullum, however, call subjects complements (2002, 216), too. Their (ibid.) distinction is between external and internal complements: the subject is an external complement as it is not inside the verb phrase itself. In contrast Haegeman (1991, 37) calls only VP internal constituents

complements. In this thesis, the view in Haegeman (ibid.) is adopted and the subject is not considered a complement.

There are labels such as ‘intransitive’, ‘monotransitive’ and ‘ditransitive’ that are sometimes used to name given complementation patterns (Huddleston and Pullum 2002, 220). These, however, only cover the object complements, while clauses and prepositional phrases can also function as complements. Clauses can be seen as complements because their type is licenced by the verb, for example:

(3) He tends to be lazy / *being lazy / *that he is lazy (Huddleston and Pullum 2002, 220).

In this example the head verb *tend* only allows the infinitival complement clause, not the *ing* clause or the *that* clause. The infinitival clause is licenced by the verb, while the others are not. This is why the two latter options form incorrect sentences. Prepositional phrases as complements are licenced by the head verbs, too, because the preposition is dependent on the verb. Huddleston and Pullum (2002, 220.) give examples:

(4) It consists of egg and milk.
(5) He didn’t look at her.

In both cases the preposition occurs because the verb licenses it and replacing them with other prepositions would render the sentences grammatically incorrect (Huddleston and Pullum 2002, 220). However, according to Huddleston and Pullum (ibid.) in some cases, such as (5), *he didn’t look at her,* some other prepositions are also possible, for example, *he didn’t look for her.* While the second sentence is correct, there is a change in the meaning of the verb and thus the relationship of the verb and the preposition is apparent. Hence we can say that PPs function as complements, too.

3.1. Complement / adjunct distinction

This subsection tries to shed light on the possible difficulties of distinguishing complements from other, superficially similar constructions. Huang (1997, 75) points out that all subcategories of verbs,

regardless of their C-selection, can be followed by, for example, time expressions expressed by prepositional phrases, noun phrases, sentences, adverbial phrases and combinations of these. These constructions are superficially similar with complement constructions. These expressions occur in addition to the elements that the verbs subcategorise for and are accounted for by the distinction between complements and adjuncts. Complements are C-selected by verbs while adjunct are not (Huang, 1997, 75-6).

At the end of the previous section, it was concluded that PPs function as complements, as they are licenced by their heads. However, there are also PPs that follow verbs but are not complements, instead, they function as adjuncts. How can one determine whether a construction is a complement or an adjunct? Herbst (2000, xxiv) points out that the distinction between complements and adjuncts is central to Valency Theory. Consider the example in Huddleston and Pullum (2002, 220):

(6) He set out <u>with / without</u> sufficient food.

Firstly, both prepositions form perfectly acceptable English sentences and thus are interchangeable. There is a change in meaning of the PP itself, but the meaning of the verb remains the same. This was not the case with example (5), where changing the preposition changed the sense of the verb. Thus, the prepositions are not licenced by the verb. Secondly, deleting the whole PP does not create an ungrammatical sentence: *he set out* is a full sentence as such, while **it consists of* in (4) is not. Hence the conclusion is that the PP in (6) is an adjunct, as it does not fulfil the criteria for a complement.

Another property of complements that separates them from adjuncts, according to Huddleston and Pullum (2002, 221) is that they can be obligatory, which adjuncts never are (as was seen in (6)). Obligatoriness as a criterion means that obligatory constituents cannot be removed without creating grammatically incorrect sentences or changing the meaning (Huddleston and Pullum 2002, 221). Obligatoriness is a stronger criterion than licencing, because it is a matter of 'must' instead of 'can', meaning that licencing allows the existence of a given type of complement while obligatoriness requires it. The complement is required to complete the sentence (Huddleston and Pullum 2002, 221).

Both licencing and obligatoriness can affect a complement at the same time, as is the case with (4) and (5).

However, there are also optional complements (Huddleston and Pullum 2002, 221). There are, for example, constituents that are licenced by a given head but the omission of which would not render the sentence incorrect, as is shown in the example by Huddleston and Pullum (2002, 222):

(7) She deposited the money in her bank account.

According to Huddleston and Pullum (ibid.), the PP headed by *in* could also be headed by *into*, but not other prepositions, which makes the PP licenced by the verb *deposit*. Nevertheless, removing the PP altogether would not make the sentence grammatically incorrect. Huddleston and Pullum (2002, 221) emphasise that obligatoriness is still an important aspect of complements.

3.2. Factors bearing on complementation

There are several theories that have tried to capture features affecting the choice of complements, and two such will be presented in this thesis. Both of these theories deal with sentential complements, and as both *that* clauses and *to* infinitives are possible with *swear*, these theories may prove helpful in the analysis.

3.2.1. The Complexity Principle

One theory which is considered to affect complementation is the Complexity Principle. According to Rohdenburg (1996, 149) "more explicit grammatical alternatives tend to be preferred in cognitively more complex environments". In other words, if a sentence has a structure that can be difficult to process, it is more likely that the complement chosen is less complicated to understand.

These "cognitively more complex environments" include discontinuous constructions, passives, and lengthy subjects, objects and subordinate clauses (Rohdenburg 1996, 149). When it

comes to the more explicit grammatical variants, Rohdenburg (1996, 152) mentions that they are usually bulkier. As an example, *that* clauses in which the complementizer has been retained are more explicit than *that* clauses with omitted complementizers (1996, 160). The following example is from Rohdenburg (ibid.):

(8) a) He told me (yesterday) that John had gone away.
b) He told me (yesterday) John had gone away.

In this example, the bracketed time adverbial *yesterday* creates discontinuity and thus the more explicit complement with the complementizer *that* (8a) is a more likely alternative according to the Complexity Principle. In the present study, the case of discontinuous constructions as a complexity factor may be relevant, considering the possibility of the verb *swear* taking the optional complement [--- *to* + recipient NP] before *that* clauses (see section 2.2). This insertion would cause a discontinuity between the verb and its *that* clause complement and, thus, retaining the complementizers would seem more likely. It remains to be seen if the data supports this conjecture.

Determining the more explicit variant is not always a matter of mere bulkiness. According to Rohdenburg (1996, 152) there can also be semantic distinctions between grammatical alternatives. For example, consider cases (9) and (10) from Rohdenburg (1996, 166):

(9) She promised (that) she would visit me (some time next year).
(10) She promised to visit me (next week).

As can be seen in the bracketed adverbs, there is a temporal difference between these forms. The finite clause in (9) seems to point at "a less immediate relationship between the superordinate and subordinate actions involved" (Rohdenburg 1996, 166). Thus using the nonfinite clause suggests that the action in the subordinate clause would take place sooner than the one in the finite clause. This semantic, temporal tendency can, however, be suspended by adverbial elements or personal object pronouns inserted between the head verb and its complement clause (Rohdenburg 1996, 166-7). Again, discontinuity affects the choice of complements, in this case the choice between finite and non-finite complement clauses.

Vosberg (2003, 306) states that extractions, too, create cognitive complexity. In Vosberg's (2003, 308) work he states that when the head verb licences both infinitival and gerundial complements, the infinitive tends to be favoured in environments with extractions. While the gerund is not licenced by *swear*, any extractions may still affect the choice between *that* clauses and *to* infinitives in that the latter will be more likely. This assumption is supported by Rohdenburg (2006, 152), who states that extraction is more difficult out of finite clauses than out of non-finite clauses.

The Complexity Principle can, thus, affect the complementation of *swear* in many ways. As was seen in the chapter on previous literature, *swear* can take optional complements, other PP complements, *that* clauses and *to* infinitives. The insertion of a PP complement in front of a finite complement can affect the form of that complement (i.e. the omission or retention of the complementizer). Additionally, other insertions, such as adverbial elements, can affect the choice between finite and nonfinite complement clauses. Extractions may have the same effect. It will be interesting to see whether the influence of the Complexity Principle is present in the data.

3.2.2. Bolinger's Principle

Another principle that may have an effect on complementation, especially when it comes to the project at hand, is called Bolinger's Principle. It states that different syntactic patterns also have different meanings (Bolinger 1968, 127). This principle deals with the differences of meaning between infinitive and gerund constructions. Bolinger (1968, 127) asserts that verbs which express "unrealized possibilities" tend to take the infinitive while verbs which express "actualities" tend to take the gerund form, instead.

According to Vosberg (2003, 306) the infinitive and the gerund as constructions have developed a semantic, temporal orientation. The infinitive marker *to*, which originally was considered a directional preposition, has gone through processes of degrammaticalization and resemantification and also acquired a sense of pointing towards a future time, not only direction (Vosberg 2003, 306).

Thus, the infinitive construction expresses future orientation while the gerund points to the past (ibid.). A similar idea is conveyed by Sag and Pollard (1991, 66). In their (1991) work on the division of verbs that take *to* infinitives, they discuss what they call "promise-type verbs". The promise-type verbs express a future commitment to performing or not performing something (Sag and Pollard 1991, 66).

The relevance of this idea that constructions carry meanings is relevant to this thesis as it regards the *to* infinitive. While the infinitive is available for only one of the senses (see table 2.5, point 2), this sense is in perfect harmony with the meaning of the construction. Sense (2) is defined as "to make a serious promise to do something, to promise to observe or perform something" and this sense seems go hand in hand with the analysis of the meaning of the *to* infinitive. Thus, one can expect these two to coincide in the data, as well.

Before a short look into corpus linguistics, followed by the analysis of the actual data, the research questions are the following:

1. What has the complementation pattern of *swear* been like in the time periods in question?
2. What are the major changes in the complementation?
3. Is the complementation sense-related?
4. Which factors have affected and currently affect the complementation patterns?

4. Corpus linguistics

The aim of this chapter is to briefly define what corpora and corpus linguistics are. I have also given an account of some possible problems one must be aware of when doing this type of research by using corpora. It also describes the corpora used in this thesis and, additionally, offers a short explanation of normalized frequencies, a tool used when comparing data from different corpora.

A corpus is, according to the *OED*, "a body or complete collection of writings or the like" or even "a body of written or spoken material upon which a linguistic analysis is based". Both corpora used in this thesis are collections of (mainly) written material.

Corpus linguistics has developed considerably in the recent decades (Biber 2010, 159). According to Biber (2010, 159-60), corpus linguistics is a methodology which produces valid information that can be generalized, as it uses computers to investigate authentic, natural texts. However, Biber (2010, 160) says that corpus linguistics is not only a methodology but it has also allowed new kind of research questions to be posed, for example on language variation. As the corpora are compilations of actual language use, they can, for example, prove the existence of given linguistic forms that the linguistic theory so far has not recognized (Biber, ibid.). In this thesis, the data come from two corpora, The Corpus of Late Modern English Texts 3.0 and the British National Corpus, which will be shortly presented in the following section.

There are also some possible problems when using a corpus. Naturally, no matter how big a corpus is, it can never include the full variety of human speech or text. This is especially a problem with corpora of older texts. For example, the compiler of the CLEMT, Hendrik De Smet (2005, 71) mentions the sociolinguistic and genre-related problems of compiling a corpus: most texts available for the compilation process were literary texts by upper class males. However, as this project is not sociolinguistic in nature, the social background of the writers can be ignored. The fact that the text type is largely literary can affect the results, as literary texts are stylistically much different from, for example, scientific texts.

4.1 The corpora

As mentioned previously, the data come from two different corpora. The first two sets of data come from the Corpus of Late Modern English 3.0 (henceforth the CLMET) and the third set of data is from the British National Corpus (henceforth the BNC). The next subsections briefly describe the corpora and some principles which have governed their compilation.

4.1.1. The CLMET 3.0

The first version of the CLMET was a corpus of about 10 million words and it was compiled by Hendrik De Smet, using texts drawn from Project Gutenberg and Oxford Text Archive (De Smet 2005, 70). In his 2005 article, De Smet presents the first version of the corpus and mentions that the corpus is not a fixed collection of texts, hence, the possibility of adding new material exists (70). (The version used in this thesis is, perhaps unsurprisingly, the third version.) The CLMET is a diachronic corpus and it is divided into three subsections, each covering a period of 70 years (De Smet 2005, 70). Moreover, the years of birth of the writers have also been restricted so as to create a collection of texts as homogenous as possible (ibid.). For this thesis, only Parts 1 and 3, covering the years 1710-1780 and 1850-1920 have been used.

Other measures have also been taken to ensure the reliability of the corpus. Firstly, all writers are native speakers of British English so as to make the dialectal variation (BrE, AmE) minimal (De Smet 2005, 71). Secondly, De Smet (ibid.) has chosen to restrict the number of texts from any given writer to prevent individual preferences from affecting the results. Thirdly, de Smet (2005, 78) mentions the previously discussed sociolinguistic and genre-related issues of compiling a corpus: these he has tried to minimize by including as many texts by female writers as possible. Additionally, when the choice was available in the text of a given writer, De Smet (2005, 71) would favour a non-literary text or a text from a lower register, instead of the literary, high-register texts.

While the basic information of the CLMET is still relevant for the CLMET 3.0 (the version used in this project), the total number of words is much higher, 34 million words, in the third version complied by De Smet, Diller and Tyrkkö (CLMET 3.0).

4.1.2. The BNC

The BNC was compiled by a consortium led by Oxford University Press (Burnard 2010). The first version was published in 1994 and it, unlike the CLMET, was a fixed corpus and, thus, not regarding minor editing done at the publication of two later versions, no additions have been made to the content of the corpus (Burnard 2010). The BNC is a synchronic corpus and includes texts from the late 20th century (ibid.).

According to the BNC reference guide (Burnard 2007), the BNC is a corpus of about 100 million words of both spoken and written language. The data is produced by British English speakers, however, some texts are from non-native speakers (Burnard 2010). Even so, the data from the two corpora largely represent the same demographic. For this thesis, only the written part, and specifically, the subsection of Imaginative Prose of the BNC has been used. This choice was made in order to ensure a certain degree of similarity and comparability with the CLMET, which, as mentioned, mainly consists of literary texts.

4.2 Normalized frequencies

Finally, a short introduction to a corpus linguistic tool is in order before moving on to the analysis. In order to be able to compare the frequencies of complements that occur in the material, a system of normalized frequencies will be introduced. Biber (1998, 263) points out that normalizing is a way to have comparable numbers even between corpora of different sizes, as is the case here. The number of occurrences is divided by the number of words in the entire section of the corpus and the result is then multiplied by a number that has been chosen for norming the frequencies (Biber 1998, 263).

So, for example, if a token occurs 123 times in a corpus of 20 million words and 31 times in a corpus of 5 million words, it is not very fruitful to compare these raw numbers with each other. For example, to state that the token occurs four times as often in the first corpus than in the second, would be a mistake. Thus, they should be normalized to see how often the token occurs per million words in both corpora. (Million is a relevant number for normalizing when both corpora have several million words.) In our example, then the calculations are as follows:

123 / 20,000,000 x 1,000,000 = 6.15
31 / 5,000,000 x 1,000,000 = 6.2

The example shows that the tokens occur just over 6 times per million words and are equally frequent in both corpora.

This system will be used throughout this thesis and the number chosen to function as the basis for normalization (the multiplier) is one million. One further point to be made, however, is the sampling done in choosing the data. In some cases, the number of relevant tokens yielded by a corpus search is much too high for analysis. In such cases, a suitable percentage of the hits must be selected. This changes the formula of our calculation. For example, if only one fourth of the tokens is selected for the analysis, this must be considered in the formula so that the divider is not the number of words in the entire corpus, instead it is one fourth of the total.

The following three chapters (5 to 7) are dedicated to presenting the results from the three sets of data. Chapter 8 discusses the results from the point of view of the Complexity Principle. Finally, chapter 9 presents an overview of the findings.

5. Corpus analysis: CLMET 3.0 Part 1

The collection of the data in the CLMET was done by using MonoConc. The programme does not allow for lemma searches and the search was done for each inflected form of the verb separately, i.e. for *swear, swears, swearing, swore* and *sworn*. The search produced almost 800 hits of which one third was taken to form the first set of data of 263 tokens. Of these 5 were excluded on the basis that they were obscure in meaning (1), adjectival (2) or nouns (3).

(1) Ye gods/ shall Cibber's son, without rebuke, Swear like a lord, or rich out-rake a duke? (Pope 1733-4, *An essay on man*)
(2) --- now entered the service of his sworn enemy. (Haywood 17744, *The fortunate foundlings*)
(3) What Addison says of swearing, may be here applied; --- (Griffith 1764, *The triumvirate*)

It can sometimes be difficult to decide whether an *ing* form is a noun or a verb. For analysing example (3), one can turn to Wasow and Roeper (1972, 46), who mention that gerunds which are not controlled by the subject or the object, are generally considered to have an 'internal structure of an NP'. As *swearing* in (3) is clearly not controlled by the subject, it must be considered nominal. Thus, disregarding tokens such as (1) to (3), the final number of tokens from the CLMET part 1 is 258.

Table 5.1 shows the raw numbers and the normalized frequencies of all complements found in the data. (The table also includes some tokens with no occurrences as this will make it easier to compare them with the other data which do include the tokens in question.) Also included is the percentage of the complement. At first glance, it may seem as though the number of different types of complements is high. However, the majority of complements are *that* clauses with a range of insertions. Figure 5.1 presents the shares of the complements divided into groups of complement types in a visual format. In the analysis, I will first deal with sentential complements and then move on to non-sentential ones. After these a section dealing with sense-related complementation will follow.

Table 5.1. Complements in Part 1 by raw numbers and normalized frequencies.

Complement	**Total**	**Norm. Fr.**	**Percentage**
that clause with Ø complementizer	70	20.2	27.1
Zero complement	54	15.6	21
that clause	46	13.3	17.9
NP	35	10.1	13.6
to infinitive	16	4.6	6.2
to + NP	11	3.2	4.3
by + NP + *that* clause	6	1.7	2.3
to + NP + *by* + NP + *that* clause	4	1.2	1.6
at + NP	3	0.9	1.2
NP + *to* + NP *(secrecy)*	2	0.6	0.79
to + NP + *that* clause	2	0.6	0.79
by + NP	2	0.6	0.79
on + NP +*that* clause	2	0.6	0.79
on + NP + *to* infinitive	2	0.6	0.79
by + NP + *that* clause with Ø compl.	1	0.3	0.39
for + NP	1	0.3	0.39
on + NP	1	0.3	0.39
to + NP + *that* clause with Ø compl.	0	0	0
on + NP + *that* clause with Ø compl.	0	0	0
TOTAL	**258**	**74.6**	**100**

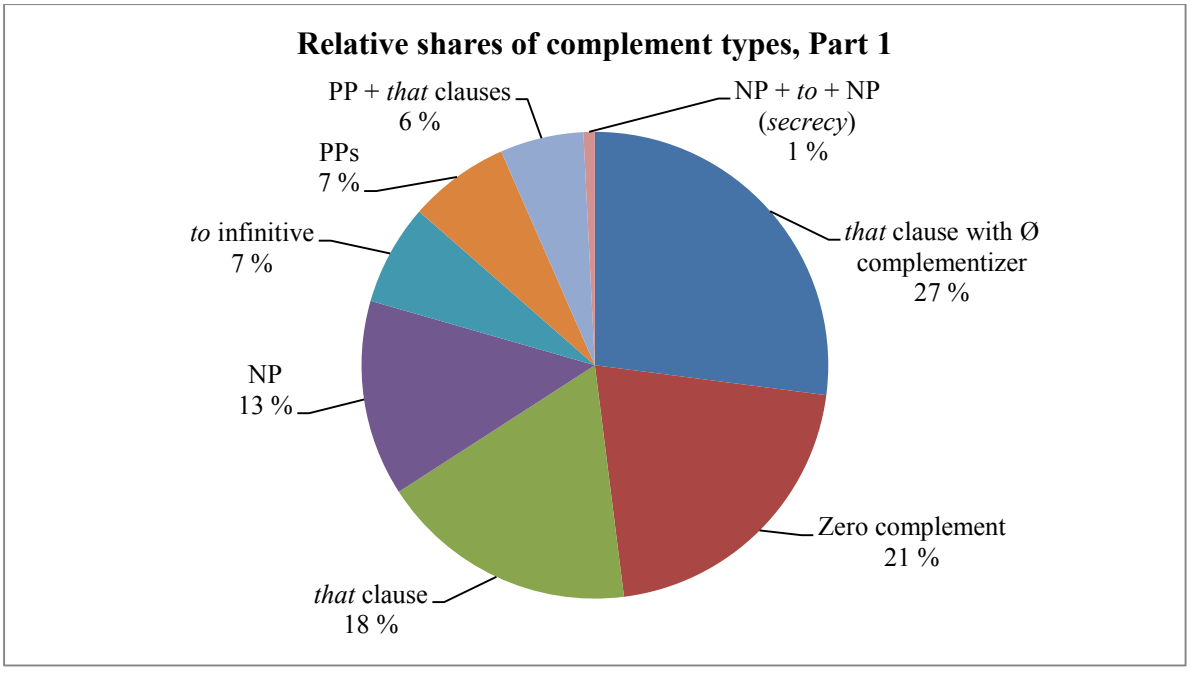

Figure 5.1 The percentage of complements divided into groups

5.1. Sentential complements

As we can see, the top five complements are both sentential and non-sentential. The sentential complements available for *swear* are *that* clauses and *to* infinitives. There are many *that* clauses that are fairly complex, with a PP preceding them. These will be dealt in a chapter of their own, as it is in their complexity that one of my interests lies (see chapter 8). Figure 5.2 shows how the shares of different complements are divided within the group of sentential complements.

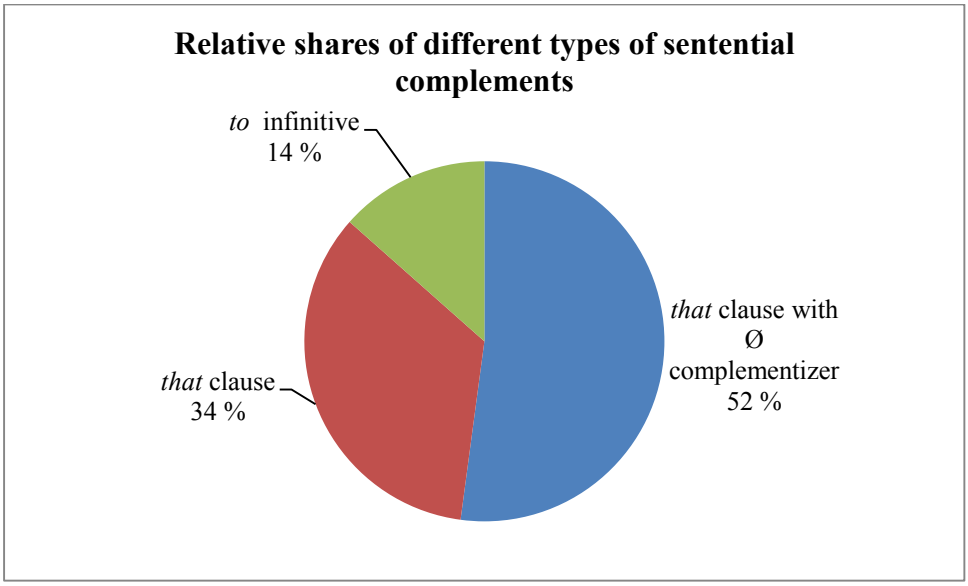

Figure 5.2 Sentential complements and their shares

5.1.1. *That* clauses

When considering all *that* clauses combined, their number is 131. This accounts for just over a half of all the tokens (51 per cent) and yields a normalized frequency of 37.8, making *that* clauses by far the most common complement. *That* clauses with and without complementizers (but without PP insertions) account for 116 tokens out of 258, amounting to about 45 per cent of all tokens. Examples of *that* clauses with and without complementizers include (4) and (5), respectively:

> (4) --- the whole Neighbourhood wou'd swear that they were Witches or Wizards --- (Lillo 1730-1, *Silvia*)

(5) I cou'd have sworn the Lady had been my old acquaintance --- (Cowley 1776, *The runaway*)

The *that* clause complements with PP insertions are combinations of sentential and non-sentential complements. As such, they could be analysed in either group but since the interest in these cases lies in the Complexity Principle, an entire section has been dedicated to their analysis, as mentioned before.

5.1.2. *To* infinitives

The other type of sentential complements, the *to* infinitive, has 16 tokens in its simple form and two with a prepositional phrase inserted before the infinitive. These 18 tokens yield a frequency of 7.0. In both two cases with an insertion the insertion is *on* + NP, for example (6).

(6) And this he swears on the Gospel of God to perform --- (Brooke 1765-70, *The fool of quality*)

There were also 3 other cases of insertions preceding the infinitives, which I have yet chosen to label as simple in table 5.1. These cases include two tokens with the word *never* inserted (7) and they are dealt with in this chapter. According to Rohdenburg (1996, 166-7) the choice between finite and non-finite complements is affected by insertions of temporal adjuncts. I consider the word *never* more functional in nature (as opposed to it being a temporal adverb) and do not see this as a case of complexity.

(7) ---the French captives should swear never to bear arms against the person of their conqueror --- (Gibbon 1776, *The decline and fall of the Roman Empire*)

However, one token had a one-word adverbial preceding it and it will occur as a counter example to the Complexity Principle in chapter 8.

It is also worth mentioning that out of all the 18 tokens of *to* infinitives, 9 are from the same text. It would thus seem that either stylistic matters or personal tastes of the writer affect this

occurrence. It will be interesting to see how the number of *to* infinitives will develop in the latter parts of the data.

The significant difference between the frequencies of the sentential complements, i.e. *that* clauses (37.8 altogether) and *to* infinitives (7.0) merits a further look. Considering on one hand the fact that sense (2), "to make a serious promise to do something" clearly refers to a future commitment, and on the other hand that the *to* infinitives entail a future orientation (see 3.2.2) it is peculiar that there should be so few infinitives. This matter will be investigated more closely in chapter 8 on the effect of the Complexity Principle on complementation in the data.

5.2. Non-sentential complements

There are many more alternatives for non-sentential complementation of *swear* as compared with sentential ones. The PPs are especially abundant in number of variants, although not in numbers. The other two non-sentential complements are the zero complement and the NP complement. Figure 5.3 shows the share of each complement type within the group of non-sentential complements.

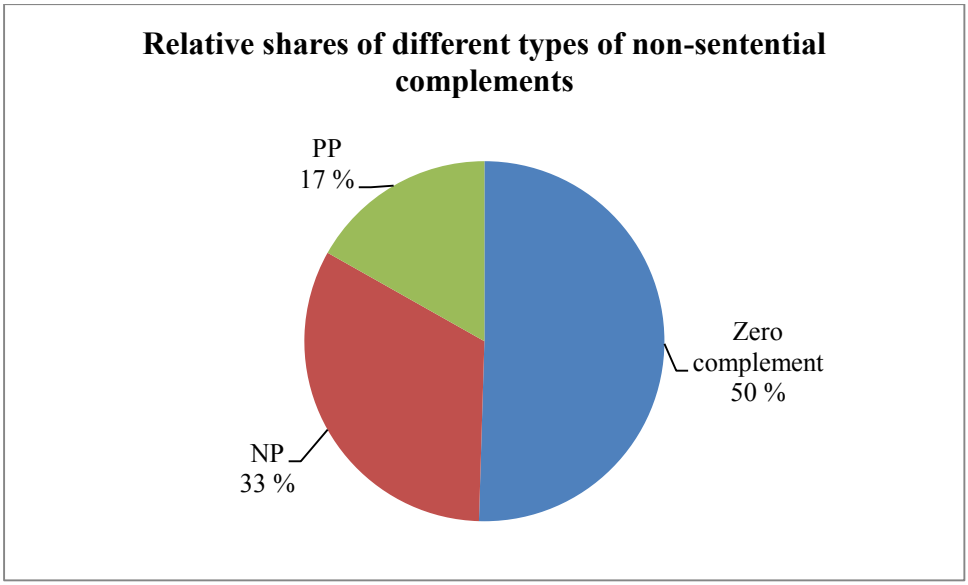

Figure 5.3 Non-sentential complements and their shares

5.2.1. The zero complement

The zero complement is the most frequent non-sentential complement. This is hardly surprising considering its availability for all senses (1) – (3). There is a point of interest within the zero complement and this is a case Ross (1974, 133) and Huddleston and Pullum (2002, 1024) call *parentheticals*. A parenthetical is a construction such as at the end of (8):

> (8) --- you have had more Rest than I, I dare swear (Chetwood, 1736, *The voyages, travels and adventures, of William Owen Gwin Vaughan Esq*)

In such cases, it would be easy to see the beginning of the sentence as a preposed, *that* clause complement. The underlying construction would then be as in (9):

> (9) I dare swear that you have had more Rest than I.

This could be analysed as *swear*, [--- *that* clause] and the analysis would then be that the complement is a *that* clause. Ross (1973, 134) calls this phenomenon sentence lifting or *slifting*, as in his analysis the *that* clause in (9) has been lifted from its subordinate position into the front of (8) where it no longer is subordinate to *I dare swear*. This slifting process also includes *that* deletion (Ross 1973, 135).

According to Huddleston and Pullum (2002, 1024), this would not be a correct analysis. Example (9) can be analysed as a case of reported speech. The clause *I dare swear* represents a reporting frame, which in this case is called a parenthetical. It is a main clause. However, the reported speech (*you have had more Rest than I)* also forms a main clause. Thus, both clauses are main clauses, and the reported speech cannot be analysed as a complement of *swear* (Huddleston and Pullum 2002, 1024). This analysis requires no underlying structures, sliftings or *that* deletions, and as such seems like a less complicated analysis. Thus all cases such as (8) have been analysed as tokens of zero complement.

The total number of occurrences of zero complements is 54. Of these 24 are complements of sense (1) ("to use rude or offensive language, usually because you are angry"), in which case they are never parentheticals, as in such cases no reporting frames are possible. Of the 30 remaining tokens of zero complements, 9 are cases of parentheticals with sense (3), such as example (8) on the previous page.

5.2.2. The NP complement

The NPs cover one third of non-sentential complements (figure 5.3) and are thus the second most common complement in this group. They also take fourth place in the overall table for complement frequency. The NP complements can be divided into two groups. There are pronominal NPs which are anaphoric expressions, as in (10).

> (10) If any person would have sworn this to me a week ago --- (Fielding 1749, *The history of Tom Jones, a foundling*)

According to the *OED* this type of NPs can complement both senses (2) and (3) (see tables 2.1 and 2.5 with the *OED* senses and how they have been combined in this thesis). In this set of data the pronominal NP complement was found mainly with sense (3), "to promise that you are telling the truth", altogether 7 times, which accounts for all but one NP complements for sense (3). With sense (2), "to make a serious promise to do something, to promise to observe or perform", the pronominal NP occurred only twice out of all 21 NP complements for this sense. Sense and complement division is dealt with in table 5.2, subsection 5.3. Example (11) represents sense (3) and (12) represents sense (2) with a pronominal NP complement:

> (11) Pardi! said my host, ces Messieurs Anglois sont des gens tres extraordinaries; and, having both said and sworn it, -- he went out. (Lawrence 1768, *A sentimental journey through France and Italy*)
> (12) Your Julia will never give her hand to another; she swears this to the dear bosom of friendship (Brooke 1763, *The history of Lady Julia Mandeville)*

The other type of NP complements are semantically much more complex noun phrases, they could be described as [+ABSTRACT], at the very least. This type of NP complement tends to have sense (2) (19 tokens out of 21 NP complements with sense 2) as it often denotes something "to observe or perform", as in (13).

(13) The people swore allegiance to his person and family --- (Gibbon 1776, *The decline and fall of the Roman Empire*)

Interestingly, the nominal NPs with sense 2 are semantically in the same field with the verbs in *to* infinitives: they tend to describe slightly grandiose promises for a high authority, as in (13) and (14).

(14) But the example of his death served only to animate the companions who had sworn to perish with their leader (Gibbon 1776, *The decline and fall of the Roman Empire*)

It is, however, not only sense (2) which takes nominal NP complements. As table 2.1 point 5a shows, also the sense which in this thesis is called sense (3), does so. The *OED* mentions an example of *swearing information*, in which the swearing is meant to declare the information true. However, in this set of data sense (3) was only once complemented by other than pronominal NP (15):

(15) --- and then he swore a solemn oath that I was (Richardson 1740, *Pamela*)

Interestingly, *swear* seems to dislike NP complements that are [+HUMAN]. The recipient of swearing is always expressed by a PP (16), thus barring the existence of direct NP objects that are [+HUMAN].

(16) Swear to me but, thou bold wretch! (Richardson 1740, *Pamela*)

The *OED* does, however, list [+HUMAN] NPs as possible complements for some cases, for example point 10d in table 2.1: *the priest swears the soldier by a most solemn oath, not to injure him*. No such tokens were found in the first set of data, and it remains to be seen if they occur in the more modern data.

The other case in the *OED* in which *swear* takes a direct NP object and which can be considered [+HUMAN] is point 11 in table 2.1 (sense (5) in this thesis): *the jury were sworn.* If this passive is

put into active, the object is *jury*, a definitely [+HUMAN] group noun. However, sense (5) i.e. *OED* sense 11 occurred only 6 times with the normalized frequency of 1.7. Again, we must see the occurrences of this kind will be more frequent in the other parts of the data.

One further case of [+HUMAN] direct NP objects with *swear* is the case of *swear*, [--- NP + *to* + NP] in which the latter NP tends to be *secrecy* (see the *OED* sense 10c, table 2.1), at least in current usage. This complement in itself is sense (4) in this thesis. As table 5.1 shows, there were only 2 tokens in the data, with just above half an occurrence per million words. Example (17) illustrates sense (4):

> (17) --- if you consent, he will marry her here, in the Presence of a few Witnesses who shall be sworn to Secrecy until his Uncles' Death; --- (Brooke 1765-1770, *The fool of quality*)

It seems peculiar that this sense or complement is so rare considering that all three dictionaries mention it as a sense in its own right. The *OED,* of course, presents a very detailed list of usage. However, the *OALD* and the *CCALD* present a much less detailed list of senses and yet includes this expression. Considering this and the fact that these dictionaries aim at giving an accurate picture of language use for learners, one would expect to find it more often. It remains to be seen if the more contemporary data show different results. In this set of data, the second NP in both occurrences was *secrecy*, thus not yielding any older constructions.

5.2.3. The PP complements

The PPs are the last group of non-sentential complements. As a reminder, the section looking into the Complexity Principle in the data will deal with the tokens with PP (and other) insertions followed by *that* clauses, thus the following deals only with the PP complements as such. Figure 5.2 shows that the share of PPs in the group of non-sentential complements is less than one fifth.

There are altogether 18 PP complements with a normalized frequency of 5.2. Of these, the majority of cases are tokens of *to* + NP, a complement that can be twofold in meaning: the

construction can point to a recipient of swearing or the person swearing is attesting to the truth value of something (see table 2.2). There were no occurrences of the first type, except for cases where a *that* clause follows, and these are dealt with in chapter 8. Attestations of the truth value of a statement covered thus all 11 tokens of *to* + NP (18) and (19):

> (18) --- has drawn up a narrative, sent it to the Bishop, and offered to swear to it (Walpole 1735-69, *Letters*)
> (19) I swore to the truth of all (Richardson 1748, *Clarissa*)

The PP complement headed by *at* is specific to sense (1) and it occurs 3 times. The PP in this sense denotes the unfortunate listener of the bad language (20). Sense (1) is not that frequent and thus the low frequency of its PP complement is not surprising. No figurative uses for this construction were found in the data. The PP complements headed by *by* (21) and *on* (22) occur as types of intensifiers with senses (2) and (3). In Part 1 data *by* occurred only in this sense. The raw numbers of *by* and *on* as such were 2 and 1, respectively, but both occurred more often with a *that* clause.

> (20) --- what the world calls a good husband. He very seldom swore at her --- (Fielding 1749, *The history of Tom Jones, a foundling*)
> (21) "Will he swear by the Gospels, the divine books ---" (Gibbon 1776, *The decline and fall of the Roman Empire*)
> (22) --- to swear on the snowy hand eternal amity --- (Brooke 1763, *The history of Lady Julia Mandeville*)

The really interesting case of PPs was the *for* + NP. This construction is not mentioned at all in the chapter dealing with previous literature on *swear* as it was listed as obsolete in the *OED*. The *OED* says: "*to swear for*: to answer for under oath, or with assurance." The examples provided in the dictionary are the following:

> 1579 S. GOSSON *To Gentlewomen* in *Schoole of Abuse* f. 43, It is hard to say that all offend, yet I promise you, I wil sweare for none.
> a1616 SHAKESPEARE *Winter's Tale* (1623) IV.iv.155 Ile sweare for'em.

According to the definition, the swearing is an action of assuring that some other person or persons (denoted by the pronominal NPs following the preposition) are answered for by the speaker. As table 5.1 suggests, one such token was found in the data (23):

(23) Col. Are you sure, Sir, that Mr. Belford is a man of honour?
Lovel. I can swear for him, Colonel (Richardson 1748, *Clarissa*)

Chapter 3 is of help in determining if this is, indeed, a case of complementation. Firstly, obligatoriness as a criterion for complementation is not very useful with *swear* as the verb occurs often and in many senses with zero complements. Secondly, the PP headed by *for* can be seen as licenced by *swear*, as it is listed by the *OED*, albeit it is considered obsolete. Cases that the *OED* lists as obsolete have not been used since the 17th century. However, as this case is from the earlier part 18th century, its writer may very well have been an old fashioned soul. There has existed a relationship of licencing or subcategorisation between *swear* and *for* and thus it can be concluded that this is a case of a PP complement.

5.3. Complementation and sense

This section considers the complementation pattern in comparison to sense. The dictionaries covered the sense-related variation of complementation, while the grammars did not. The discussion here is based on tables 2.1 and 2.5, i.e. the sense and complement division in the *OED* and the simplified division used in this thesis.

Table 5.2 shows the distribution of complements into senses. Senses (4) and (5) are not covered in this table as their overall occurrence is low. The other sets of data will show if these senses have increased in use since the 18th century.

Table 5.2. Senses and complements in Part 1.

Complement	**Sense 1**		**Sense 2**		**Sense 3**	
	Number	**NF**	**Number**	**NF**	**Number**	**NF**
Zero complement	24	6.9	1	0.3	29	8.4
that clause			25	7.2	21	6
that clause with Ø complementizer			24	6.9	46	13.3
to + NP + *that* clause			1	0.3	1	0.3
to infinitive			16	4.6		
NP			21	6	8	2.3
at + NP	3	0.9				0
by + NP					2	0.6
by + NP + *that* clause			3	0.9	3	0.9
by + NP + *that* clause with Ø compl.					1	0.3
for + NP			1	0.3		
on + NP					1	0.3
on + NP +*that* clause			2	0.6		
on + NP + *that* clause with Ø compl.						
on + NP + *to* infinitive			2	0.6		
to + NP					11	3.2
to + NP + *by* + NP + *that* clause			3	0.9	1	0.3
NP + *to* + NP (*secrecy)*						
TOTAL	**27**		**99**		**124**	

Sense (1), "to use rude or offensive language", offers little for discussion. It occurs mostly without a complement and the only possible complement for it is the [---- *at* + NP]. This PP complement is not available for other senses of the verb, as it expresses the recipient of the rude comments.

Sense (2), however, has a wide variety of complements. Sense (2), "to make a serious promise to do something, or to promise to observe or perform", does not occur often with zero complement. This may be because it seems natural to express what a person has sworn to do or observe. This is expressed by *that* clauses and *to* infinitives. NP complements with sense (2) generally have to do with the "to promise to observe or perform" part of the sense and they are typically nominal NPs.

Sense (3), "to promise that you are telling the truth" prefers *that* clauses. They express the fact the truth of which the speaker wishes to assert. Zero complements are often the so-called parentheticals, which occur at the end of the sentence. Considering that the texts are mainly novels and short stories, the high occurrence of these parentheticals seems only natural, as they appear to be types of reporting frames.

Sense (4) only occurred in 2 tokens. As mentioned before, this expression was found in all three dictionaries, including two learner's dictionaries. Thus it might be expected that its occurrence is higher in the more contemporary texts. Sense (5), as mentioned in subsection 5.2.2 had 6 occurrences with the normalized frequency of 1.7.

Figure 5.4 shows the shares (in percentage) of different senses.

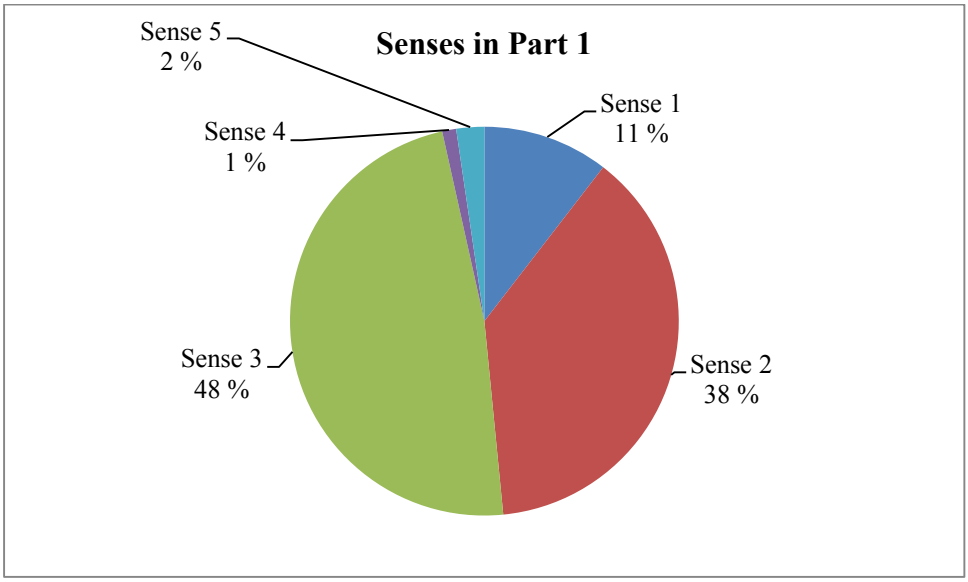

Figure 5.4 Relatives shares of the senses

6. Corpus analysis: CLMET 3.0 Part 3

The second section yielded about 600 hits, which were thinned to a half yielding 311 tokens. Of these 25 were excluded. Again, the reasons for excluding tokens were obscurity of meaning (1), adjectival usage (2) and nouniness (3). "Nouniness" as a term is borrowed from John Robert Ross (2004, 351-2) and it refers to a progression between verbs and nouns, and the gerund, for example, lies somewhere between these end points of the scale. The nominal nature of (3) is further emphasized by its coordination with *noise*, which is clearly a noun.

> (1) He shakes his dead. Swear! He rises and, as he does so, --- (Kingsley 1901,*The History of Sir Richard Calmady*)
> (2) Why, my boy Jacob there and your father were sworn brothers --- (Hardy 1874, *Far from the Madding Crowd*)
> (3) --- a feat which was not accomplished without a deal of swearing and noise. (Hardy 1873, *A Pair of Blue Eyes*)

The final number of tokens from the CLMET part 3 is 286.

Table 6.1 outlines the complements found in CLMET Part 3 together with their raw numbers, normalized frequencies and percentages. As table 6.1 shows, there have been some changes as compared with the older data, but none very significant. However, the overall frequency of the verb *swear* has become lower, from 74.6 instances per million words to 45.3 ipmw. This may affect the analysis considering that all frequencies will be lower. However, the relative share of each complement can be compared to the previous data.

To mention some main points about table 6.1, one can notice that the zero complement has reached the status of the most frequent complement, and the NP complement has risen in the table, as well. Thus, the order of the top three complements has changed. Chapter 7 will show which, if any, of these changes still exist in the most recent data. Figure 6.1 offers a visual image of the shares of the complements. Some complements, for example, the PP + *that* clause complements have been grouped so as to make the figure more informative.

Table 6.1. Complements in Part 3 by raw numbers and normalized frequencies.

Complement	**Total**	**Norm. Fr.**	**Percentage**
Zero complement	63	10	22
that clause with Ø complementizer	50	7.9	17.5
NP	48	7.6	16.8
that clause	34	5.4	11.9
to + NP	22	3.5	7.7
to infinitive	20	3.2	7
at + NP	15	2.4	5.2
to + NP + *that* clause	10	1.6	3.5
by + NP	7	1.1	2.4
NP + *to* + NP *(secrecy)*	4	0.6	1.4
to + NP + *that* clause with Ø compl.	3	0.5	1
by + NP + *that* clause	2	0.3	0.7
on + NP	2	0.3	0.7
on + NP +*that* clause	1	0.16	0.35
by + NP + *that* clause with Ø compl.	1	0.16	0.35
to + NP + *to* infinitive	1	0.16	0.35
on + NP + *to* infinitive	1	0.16	0.35
off + NP	1	0.16	0.35
on + NP + *that* clause with Ø compl.	1	0.16	0.35
for + NP	0	0	0
TOTAL	**286**	**45.3**	**100**

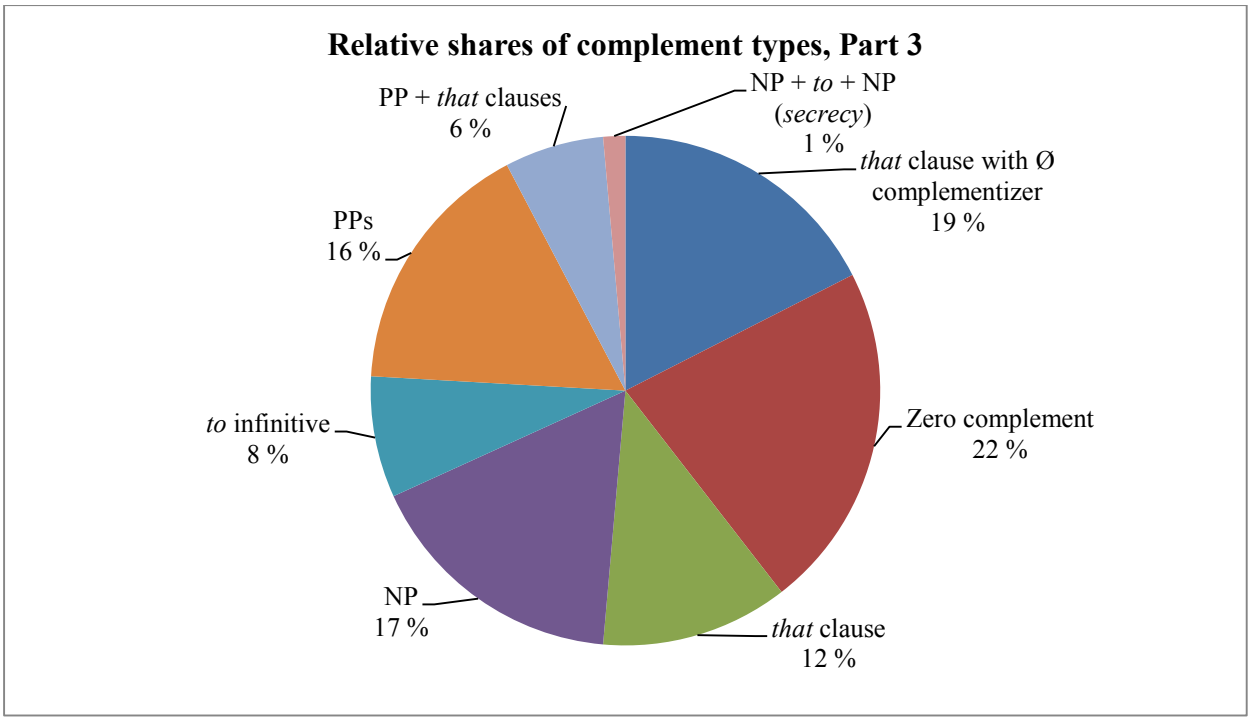

Figure 6.1 The percentage of complements divided into groups

6.1. Sentential complements

This section looks into *that* clauses and *to* infinitives. As mentioned in the analysis of Part 1 data, *that* clauses occurring with PP insertions preceding them will be dealt with under the section on the Complexity Principle. Figure 6.2 shows the shares of different complements within the group of sentential complements in Part 3 and the changes in the relative shares of sentential complements between Parts 1 and 3.

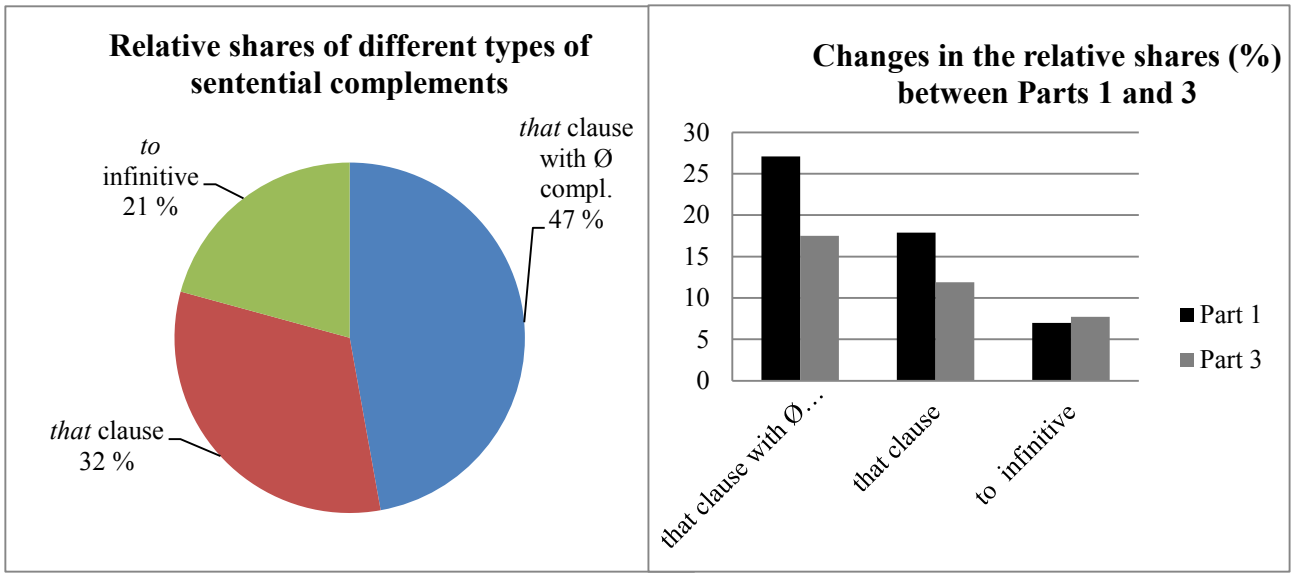

Figure 6.2 Sentential complements and their shares; the changes between Parts 1 and 3

6.1.1. *That* clauses

While there have been changes in the frequencies and the order of the complements, one construction seems to have kept its popularity: the *that* clause. When counting together all different kinds of *that* clauses, the raw number is 102 and normalized frequency 16.2. As a group, thus, it is again the most frequent complement, with a relative share of 36 per cent. The numbers from Part 1 were 131 tokens, with frequency of 37.8 and relative share of 51 percent. Thus, the share of *that* clauses has in general declined, as can also be seen in figure 6.2. The number and frequency of *that* clauses without

insertions are 84 and 13.39. Their relative share is 26 per cent. In Part 1 there were 116 tokens with a frequency of 33.5 and relative share of 45 per cent.

The complementizer is omitted in most *that* clauses without complexity, just as it was in the earlier data. The percentage of *that* clauses without complementizers is 63 while it was 64 per cent in the data form 1710-1780. No significant changes are to be seen is this respect. Examples of *that* clauses with (4) and without (5) complementizers:

> (4) I swore that they should hear me yet --- (*Punch*, Vol. 99, 1890)
> (5) When she was brought here, Walter swore he would bend her to his will; --- (Yonge 1870, *The Caged Lion*)

6.1.2. *To*-infinitives

The *to* infinitives have a slightly lower normalized frequency here as in Part 1 (4.6 and 3.2 for infinitives without insertions). However, their relative share has risen from 6.2 to 7.7 out of all complements for *swear* (see figure 6.1). *To* infinitives occur both with (6) and without (7) insertions, although the tokens with insertions preceding the infinitive account only for 2 out of all 22 *to* infinitives. It is difficult to make any major generalizations about the changes in infinitives as complements, however, as half of the occurrences in Part 1 were from the same text.

> (6) 'I, Walter Stewart, Master of Albany, hereby swear to God and St. Andrew, to fight in no private brawl ---' (Wallace 1869, *The Malay archipelago*)
> (7) --- Harry had sworn to surrender to William --- (Freeman 1888, *William the Conqueror*)

Example (6) is interesting as it combines an optional complement denoting the recipient of the action with an infinitive. According to the Minimal Distance Principle (Rosenbaum 1970, 25-6) the controller of the implicit subject in the lower clause is most often the NP closest to it. Thus, the implicit or unmentioned subjects of the *to* infinitive clause in (6) would be *God* and *St. Andrew.* The person not fighting in a private brawl would not be the person swearing, i.e. Walter Stewart. Such an analysis would probably be counterintuitive to most speakers of English; instead, the implicit subject

of the lower clause is coreferential with the subject of the main clause. Here, then, the Minimal Distance Principle is not relevant.

This latter set of data also exhibits a much larger number of *that* clauses than *to* infinitives. I will come back to this matter in chapter 8. The subsection 3.2.2 outlined Bolinger's Principle on the meaning differences between different syntactic patterns (Bolinger 168, 127). This principle combines form and meaning and its relevance here is to the infinitive structure, which has a forward looking meaning to it. There are few *to* infinitives in Part 3, although the meaning of the infinitive according to the principle mentioned above would perfectly complement sense (2) in itself.

The vast majority of *that* clauses complementing sense (2) had coreferential subjects in the superordinate and subordinate clauses, thus making it possible to turn them into *to* infinitives. For example, (8) and (9) are semantically similar:

(8) I swear also that I will honour --- (Haggart 1887, *She*)
(9) I swear also to honour ---

Chapter 8 aims at giving an explanation to the choice between sentential complements.

6.2. Non-sentential complements

There have been quite some changes in this group of complements. As the overall frequency of *swear* was much lower in Part 3 than it was in Part 1, it is the percentages of complements that ease the analysis of possible changes. Whereas the relative shares of *that* clauses had declined, the shares of all non-sentential complements have risen in Part 3. In addition to that, the division of non-sentential complements into zero complements, NPs and PPs has changed (see figure 6.3):

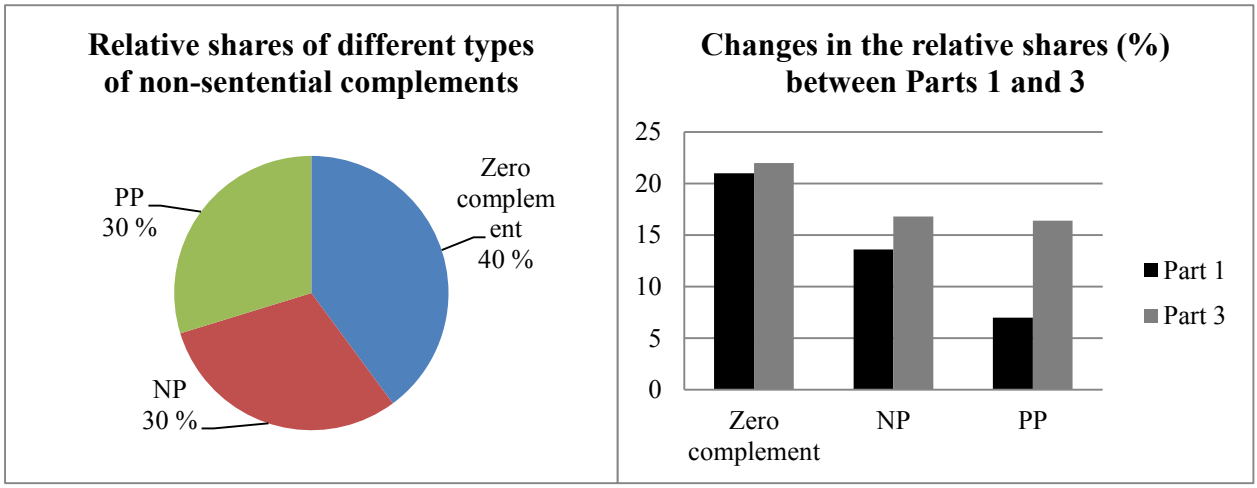

Figure 6.3 Non-sentential complements and their shares; the changes between Parts 1 and 3

6.2.1. The zero complement

It is little surprising that the zero complement is the most common complement, seeing that it occurs with several senses. It is less frequent than it was in Part1 (15.6 in Part 1, 10 in Part 3), however, its relative share of all complements has grown (figure 6.3). At the same time its share within non-sentential complements has fallen. The third set of data will show if either of these trends is continuing.

In this set of data, the zero complement occurs most often with sense (1) (sense/complement discussion follows in section 6.3). Of 63 tokens with zero complements 43 had sense (1). Of the remaining 20 about a half were parentheticals. To recap, Huddleston and Pullum (2002, 1024) call parentheticals constructions which function as types of reporting frames for the matrix clause of reported speech. While they (ibid.) do not mention *swear* as a typical verb in this construction, I have chosen to do as the examples such as (11) in this section and (15) in the previous one clearly demonstrate the same characteristics. Here are examples of zero complements with sense (1) (10), parentheticals (11) and non-parenthetical (12):

> (10) Stir him up with a long pole, Jack, and hear him swear like a drunken sailor (Hughes 1857, *Tom Brown's Schooldays*)

(11) Old blood always wins that race, I swear (Meredith 1870, *The Adventures of Harry Richmond*)
(12) 'Loose me, and I will swear', he faintly murmured (Yonge 1870, *The Caged Lion*).

6.2.2. The NP complement

The NP complement is also less frequent in Part 3 than it was in Part 1, frequencies 7.6 and 10.1, respectively. Much as was the case with the zero complement, the NP complement has, however, a larger share of complements altogether. Its share in the group of non-sentential complements has fallen, but not very dramatically. Whether the development continues along these lines will be seen in the next chapter. The division of NP complements into nominal and pronominal NPs is relevant here, too. Sense (3), as in Part 1, takes mainly pronominal NPs, which refer anaphorically to a previous statement (13):

(13) I swear this is my last voyage; see, I lay my hand upon the Holy Book and swear it (Henley and Stevenson 1892, *Admiral Guinea*)

There are three exceptions to this i.e. out of 13 NP complements for sense (3) only 3 are nominal, as in (14):

(14) On the trial, one of the men who had witnessed the murders, and whom Mr C- called to swear informations --- (*Chambers's Edinburgh journal*, nr. 418-462, 1852)

Apart from the fact that the plural form of the word *information* is somewhat unfamiliar, this phrase *swearing information* was mentioned in the *OED* as an example of sense (3) nominal NP complements.

NP complements for sense (2) in Part 1 were almost exclusively nominal (19 out of 21). There is not much more variation in Part (3) when it comes to this matter, numbers being 18 out of 21. The following are examples of sense (2) complemented by nominal (15) and pronominal (16) NPs:

(15) --- from my brother CARAMEL we have sworn fraternity --- (*Punch* Vol. 99, 1890)
(16) I will do anything you bid me; I swear it in the face of heaven (Henley and Stevenson 1892, *Admiral Guinea*)

Determining whether tokens such as (14) and (15) are sense (2) or (3) relies on the context. In (14) the truth of something is being sworn, thus, it is sense (3). Example (15) is seen as sense 2, as it is a promise of observing something, a future commitment.

Within the framework of NP complements, the rare occurrence of direct NP objects which are [+HUMAN] was noted in the discussion of Part 1 findings. As mentioned in subsection 5.2.2 the *OED* lists such complements as possible giving the example (point 10d in table 1): *the priest swears the soldier by a most solemn oath, not to injure him*. No such cases were found in Part 1, but three interesting tokens occurred in Part 3 data. Consider (17), (18) and (19):

> (17) From you I want no oath; which, according to my experience, tempts a man to lie the more, by making it more important. I know you now too well to swear you, though I have the power. (Blackmore 1869, *Lorna Doone, a Romance of Exmoor*)
> (18) --- a few days later a mob from the Liberties attacked the house of the Attorney-General, and proceeding to Parliament, swore all the members they found to vote only short money bills till free trade were conceded;--- (Rae 1895, *Life of Adam Smith*)
> (19) --- a Jury sufficiently numerous to be reasonably representative of the general feeling of the community and sufficiently small to be able to talk easily together and to do the business without debating society methods—between twenty and thirty, I think, might be a good working number—and suppose we were, after a ceremony of swearing them and perhaps after prayer or after a grave and dignified address to them upon the duty that lay before them --- (Wells 1903, *Mankind in the Making*)

Token (17) corresponds to the *OED* point 10a, "to cause to take an oath". Old fashioned as it may sound, one token at least thus occurred in the 1850-1920 data. Token (19) can be analysed as the only case of sense (5), or *OED* sense 11 (e.g. *the jury were sworn*) in Part 3. This choice is made solely based on the fact that the subject is *jury*. Sense (5) had a frequency of 1.7 in the earlier data. This together with the earlier points made may suggest that the verb is increasingly reluctant to take such object complements.

However, token (18) offers an interesting case for interpretation. It takes a direct NP object that is [+HUMAN], just as the previously mentioned point 10d in the *OED* does. The sense of this token and the point in the *OED* fall under sense (2): they express future commitment. In most typical tokens of sense (2) speakers commit themselves to the promise they make. The difference to the typical

tokens of sense (2) is that in token (18) someone, by swearing, makes somebody else to commit him-/herself into performing or observing something. To further understand these tokens, a concept of Construction Grammar is briefly introduced.

In her work on Construction Grammar, Goldberg (1995, 9) introduces a similar type of an example. A typically intransitive verb *sneeze* takes not only an object but also a third argument (as the subject is one, too) in "*he sneezed the napkin off the table*". Using traditional methods, one would have to add an entry to dictionaries to account for this sense of *sneeze*. The new entry would not only have to define this sense of the verb as transitive but also take into account the three new arguments in the meaning of X causes Y to move Z by the means of sneezing (Goldberg 1995, 9).

Construction Grammar rejects the idea that there is such a division between lexicon and grammar, instead it assumes that both "lexical and syntactic constructions --- pair form with meaning" (Goldberg 1995, 7). This means that it is not only words that carry meanings; constructions do that, as well, and no grammatical construction is merely a form, it also has a meaning of its own. Thus, in the example "*he sneezed the napkin off the table*", there is no need to add senses and new arguments structures to the definition of *sneeze*. The construction can be seen as the source of both the new meaning (X causes Y to move Z by the means of sneezing) and the new arguments (Goldberg 1995, 10).

The relevance of Construction Grammar is that an example such as (18) can be analysed under the same framework. The lexical item *swear* carries the meaning "to promise to perform or observe something". In addition to that, the underlying construction adds the meaning "X causes Y to perform/observe Z by the means of swearing". Let us see example (18) again, here represented as (20):

> (20) --- a few days later a mob from the Liberties attacked the house of the Attorney-General, and proceeding to Parliament, swore all the members they found to vote only short money bills till free trade were conceded;--- (Rae 1895, *Life of Adam Smith*)

In (20), “the mob from the Liberties” “committed all the members they found to vote by the means of swearing”. Personally, I find that sentences such (20) sound quite old fashioned. However, no such tokens were found in the oldest data. The next chapter will be of importance in determining whether the kind of thinking in Goldberg (1995) has made this construction more natural to users of 20th century English.

6.2.3. The PP complements

Now let us deal with PP complements as the final group of non-sentential complements. The simple PPs had 47 occurrences and a normalized frequency on 7.4, meaning the frequency was higher than in Part 1 (18 occurrences, frequency of 5.2). The PP complement is the only complement with a higher frequency in Part 3 than in Part 1. Its relative share both within non-sentential complements and all complements has risen quite notably. The rise is to a degree explained by PPs [--- *at* + NP] and [--- *by* + NP], which both occurred more often in the latter set of data.

The [--- *at* + NP] complement, specific to sense (1), occurred 15 times with a frequency of 2.4, higher than in Part 1(3 and 0.9). This rise may be attributed to the rising frequency of the whole sense. No figurative uses such as table 2.2 mentioned were found. The PPs headed by *by* and *on* had 7 and 2 occurrences, with frequencies of 1.1 and 0.3, respectively. The frequencies of these two PP complements have not changed much as compared with Part 1, where their frequencies were below one. Again, they occur more often when combined with *that* clauses, as their function is intensifying the oath sworn. Examples of these three PP complements include (21) – (23):

> (21) Montmorency’s ambition in life, is to get in the way and be sworn at (Jerome 1889, *Three Men in a Boat*)
> (22) --- that’s why it’s always safest to swear by the Judge (Meredith 1870, *The Adventures of Harry Richmond*)
> (23) --- Harold is even made to swear on hidden relics --- (Freeman 1888, *William the Conqueror*)

However, *swear by* has other senses besides the intensifying function it shares with *on*. It can also mean "to be sure of the existence of something" or "to accept as an infallible authority". Both were found in Part 3 data. Example (24) shows the previous use and example (25) the latter:

> (24) I had a smattering of Italian and enough Spanish to swear by. (Hope 1894, *The Prisoner of Zenda*)
> (25) "That [old watch] was father's," said Constance. "He always used to swear by it. When it didn't agree with the Town Hall, he used to say: 'Then th' Town Hall's wrong.'(Bennett 1908, *The Old Wives' Tales*)

There was also a slight rise in the frequency of [--- *to* + NP]. Its occurrence in Part 1 was 3.2 and is 3.5 in Part 3 (raw numbers 11 and 22). Examples of [--- *to* + NP] complements with both recipient (26) and truth value meanings (27) were found:

> (26) They had to swear to the commune, but many of them, Geoffrey for one, had no thought of keeping their oaths. (Freeman 1888, *William the Conqueror*)
> (27) "--- It is my intention to let you go free." "I knew it. I could have sworn to it. You're a noble fellow, John." (Blackmoore 1869, *Lorna Doone, a Romance of Exmoor*)

The [--- *for* + NP] anomaly of Part 1 did not occur in Part 3, giving further evidence to the disappearance of the PP as a complement for *swear* and making it more likely that the occurrence in Part 1 can be attributed to the given writer. Part 3 data did, however, have one PP complement absent from Part1, namely, the *off* + NP complement. In this thesis, this token has been analysed as sense (2), as mentioned in section 2.1, as its meaning is making a future commitment, that is, promising to abstain from something, as in (28).

> (28) No: you've sworn off two cups (Shaw 1897, *You can never tell*)

6.3. Complementation and sense

This section deals with sense-related phenomena of complementation. Table 6.2 on the following page shows the occurrences of complements divided into senses.

Table 6.2 Senses (1) to (3) and their complements

Complement	**Sense 1**		**Sense 2**		**Sense 3**	
	Number	**NF**	**Number**	**NF**	**Number**	**NF**
Zero complement	43	6.8	2	0.3	18	2.9
that clause			10	1.6	24	3.8
that clause with Ø complementizer			14	2.2	36	5.7
to + NP + *that* clause			4	0.6	6	1
to + NP + *that* clause with Ø compl.			1	0.16	2	0.3
to infinitive			20	3.2		
NP			34	5.4	13	2.1
at + NP	15	2.4				
by + NP					7	1.1
by + NP + *that* clause			2	0.3		
by + NP + *that* clause with Ø compl.			1	0.16		
off + NP			1	0.16		
on + NP					2	0.3
on + NP +*that* clause			1	0.16		
on + NP + *that* clause with Ø compl.			1	0.16		
on + NP + *to* infinitive			1	0.16		
to + NP + *to* infinitive			1	0.16		
to + NP					22	3.5
NP + *to* + NP (*secrecy)*						
TOTAL	**58**		**93**		**130**	

Here too, senses (4) and (5) have been left out based on their low frequencies. Sense (4) had 4 tokens with a frequency of 0.6 and sense (5) occurred only once with a frequency of 0.16. The change from the earlier set of data is virtually non-existent (0.9 and 0.8). The final set of data from the BNC will show if these senses have become more common in contemporary English, as one might expect considering their occurrence in the learner's dictionaries, especially. Figure 6.4 shows the shares of different senses in Part 3 and the change which has taken place between Parts 1 and 3.

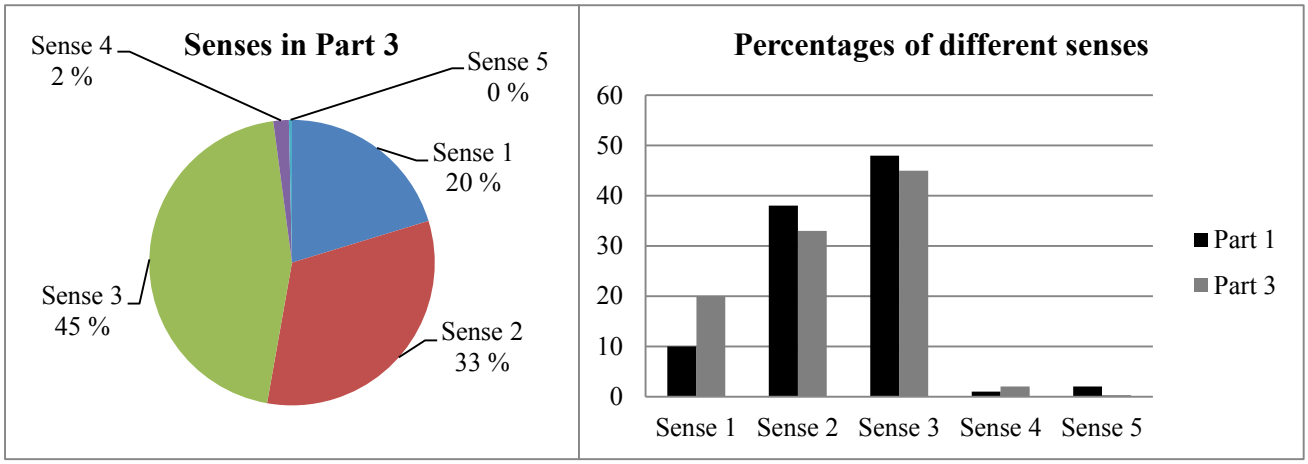

Figure 6.4 Percentages of senses and the changes as compared with Part 1

Sense (1) ("to use rude or offensive language") is the only sense with a higher frequency (9.2) than in the earlier set of data (7.8).This is a fairly remarkable change in the light of the lower overall frequency of *swear* in Part 3. It also has a higher percentage than in the earlier data. There is a change in complementation too, in the sense that the relative share of zero complements has fallen. In Part 1, sense (1) had a zero complement in 89 per cent of the tokens. In Part 3, this percentage has fallen to 75 percent. It remains to be seen if sense (1) as such and the [--- *at* + NP] complement continue to flourish.

As can be seen in tables 5.2 and 6.2, senses (2) and (3) follow the overall trend and have much lower frequencies in Part 3. Similarly, their relative shares are lower in Part 3 data. The frequency of sense (2) ("to make a serious promise to do something, or to promise to observe or perform") has fallen from 28.3 to 14.7. The data from the BNC will show whether this trend still continues or if this change is due to the lower overall frequency. NPs and *to* infinitives are still the most typical complements for sense (2), with frequencies of 5.2 and 3.2. However, the frequency of *that* clauses has fallen as compared with Part 1. This change is the most prominent with simple *that* clauses. The frequency of simple *that* clauses with complementizers has fallen from 4 to 1.1 and without a complementizer from 5.8 to 1.9. Again, the BNC will be in an important position to reveal which changes are permanent.

Sense (3), “to promise that you are telling the truth”, has a frequency of 20.4 as compared with 35.9 in Part 1. As far as complements are concerned, this declining of the frequency has affected the zero complement and *that* clause complements the most. Combined with the results of sense (2) it would seem that *that* clauses are losing ground, so to speak. With the help of the BNC the truth of this will be seen.

7. Corpus analysis: the BNC

The collection of the data in the BNC was done with the search string {swear} _V*, which is a so called lemma search. It includes all inflected forms of the verb. This query produced over 950 hits, which were thinned to a random reproducible sample of 25 per cent giving 238 tokens. Of these one was a phrasal verb, as in (1) and three were adjectival as in (2) and as such they were excluded from the final data for this thesis. Hence the final number of tokens from the BNC is 234.

> (1) '--- while Constable Aplon rides to Burford to swear out a search warrant.' (HHC 2058)
> (2) One minute they were sworn enemies --- (JYD 1467)

Thus all three sets of data yield a final number of tokens of 778.

Table 7.1 outlines the complements found in the BNC data with their raw numbers, normalized frequencies and percentages. Below the table, Figure 7.1 will again offer a visual image of the relative shares of the complements. They have been grouped together for the sake of easier reading.

The bottom of the table shows that many complement types have disappeared completely. The zero complement is the most frequent representing 36 per cent of the tokens. No major changes seem to have occurred when it comes to which the most common complements are. However, the *to* infinitive has fallen some steps in the table. The following sections will analyse the complements with a division into sentential and non-sentential complements.

Table 7.1. Numbers and normalised frequencies of complements

Complement	**Total**	**Norm. Fr.**	**Percentage**
Zero complement	85	20.6	36.2
that clause with Ø complementizer	54	13.1	23.1
NP	23	5.6	9.8
that clause	19	4.6	8.1
at + NP	16	3.9	6.8
to + NP + *that* clause with Ø compl.	10	2.4	4.2
to infinitive	6	1.5	2.6
to + NP + *that* clause	6	1.5	2.6
to + NP	6	1.5	2.6
by + NP	3	0.7	1.3
on + NP	3	0.7	1.3
by +NP + *that* clause	1	0.2	0.43
on + NP + *that* clause	1	0.2	0.43
on + NP + *that* clause with Ø compl.	1	0.2	0.43
NP + *to* + NP *(secrecy)*	0	0	0
by + NP + *that* clause with Ø compl.	0	0	0
to + NP + *to* infinitive	0	0	0
on + NP + *to* infinitive	0	0	0
off + NP	0	0	0
for + NP	0	0	0
TOTAL	**234**	**56.7**	**100**

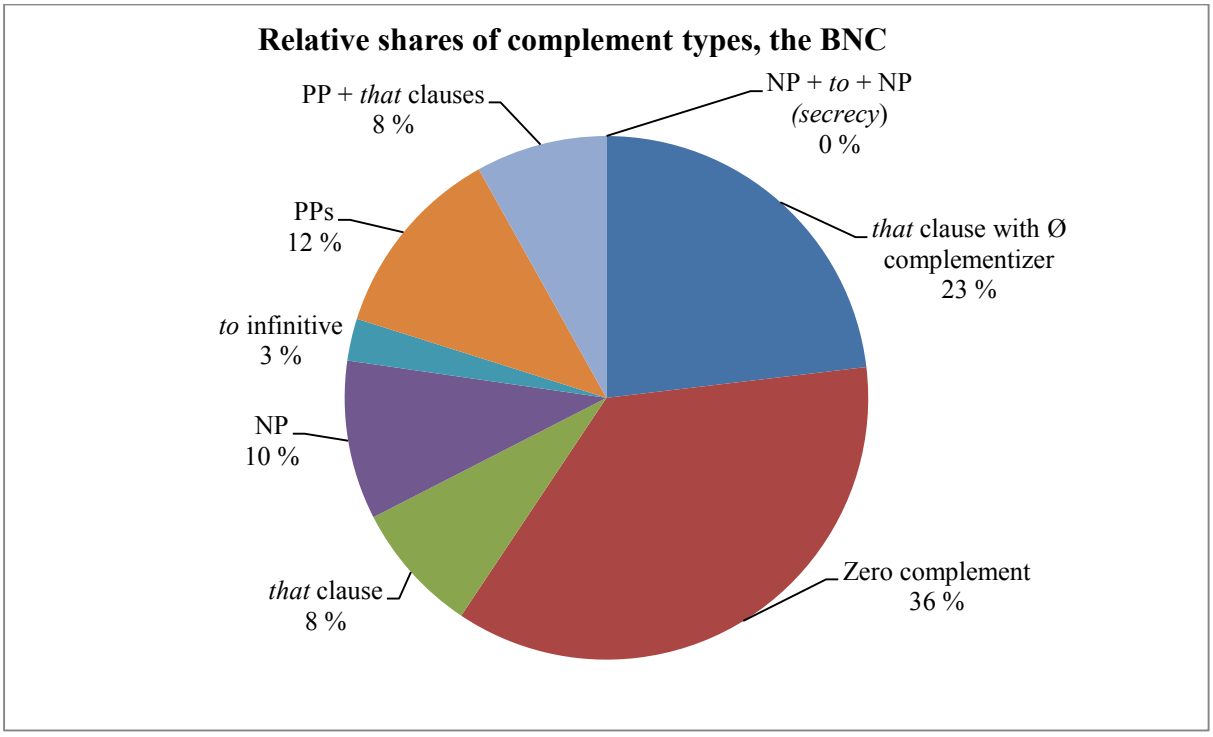

Figure 7.1 The percentage of complements divided into groups

7.1. Sentential complements

The sentential complements have remained the same, they are *that* clauses and *to* infinitives. It is their shares that have undergone changes. The relative share of *to* infinitives has fallen to below 10 per cent while the share of *that* clauses with omitted complementizers is almost 80 per cent within the group of sentential complements. The shares of these complements do not seem to follow any given pattern. *That* clauses with complementizers have a steadily diminishing share. The data in Part 3 gives varying results for the other two sentential complements: the share of *that* clauses with zero complementizers has plummeted in Part 3, only to rise again in the BNC data. The share of *to* infinites has done the opposite: a rise in Part 3 has been followed by an all-time low share in the BNC.

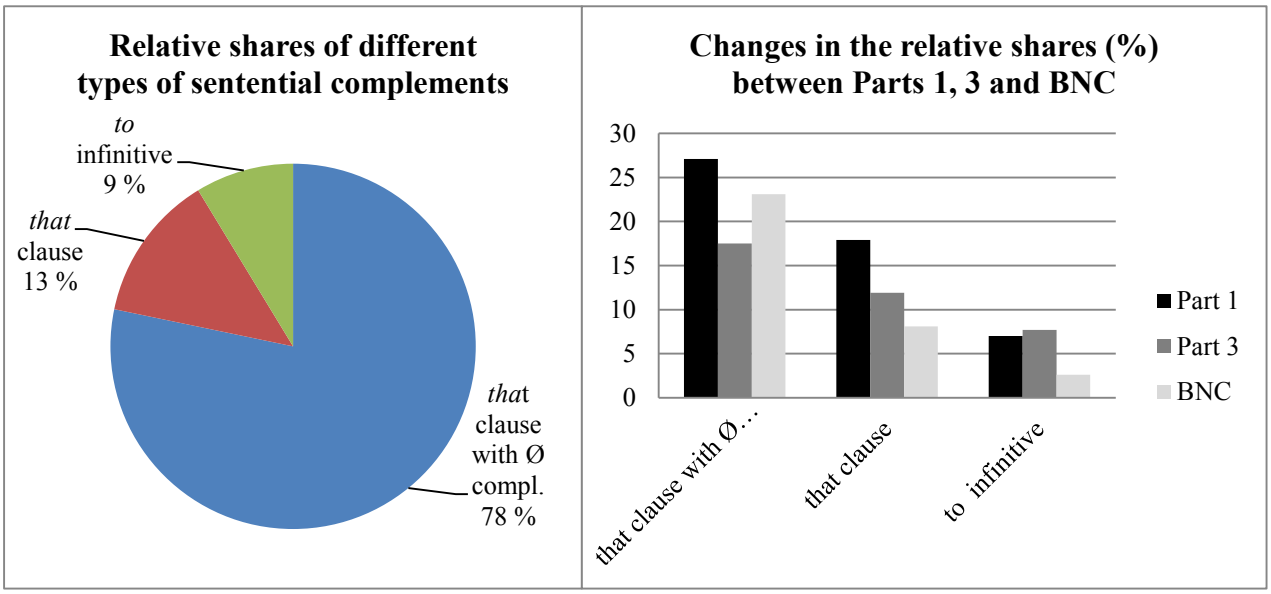

Figure 7.2 Sentential complements and their shares; the changes between Parts 1, 3 and the BNC

7.1.1. *That* clauses

Sentential complements found in the data varied to quite a remarkable extent when it comes to their frequencies. *That* clauses, both with and without the complementizer, were frequent. *That* clauses also include tokens with PPs preceding them, but again the chapter on Complexity will be devoted to analysing these occurrences. The overall raw number of all types of *that* clauses was 92 with

normalized frequency of 22.3, making *that* clauses as a group even more frequent than zero complements. Their relative share of all complements is 39 per cent. In Parts 1 and 3 the percentages of all types of *that* clauses were 51 and 36 per cent, respectively. Thus, there seems to be little change between Part 3 and the BNC data.

The number and normalized frequency of *that* clauses (without complexity factors) are73 and 17.7. Their relative share of all complements is 31 per cent, while it was 45 per cent in Part 1 and 29 per cent in Part 3. Again, the change seems to have occurred in the time gap between Parts 1 and 3 i.e. between 1780 and 1850. The frequencies chronologically are 33.5, 13.3 and 17.7. Thus, the occurrence of *swear,* [--- *that* clause] in a million words has become less common. Examples of *that* clauses with (3) and without (4) the complementizer from the BNC include:

(3) '--- a knight who swore that King Henry disinherited Matilda', --- (HH1 89)
(4) She swore you had. (FP1 1184)

7.1.2. *To* infinitives

The *to* infinitive was not very frequent, and additionally, it has become notably less common. The rare occurrence of *to* infinitives can, of course, to some degree be accounted for by the fact that they can only complement *swear* in one of its senses, while *that* clauses and NPs can complement several, and the overall occurrence of this sense (sense (2)) has become lower. However, the decline of the frequency of sense (2) occurred already between Part 1 and 3 (see figure 6.2) and the decline of the frequency of *to* infinitives has occurred between Part 3 and BNC. According to Rohdenburg (2006, 143), the sentential complementation of English has been restructured in the past centuries and one major change in the system has been the "establishment of the gerund at the expense of infinitives (and *that* clauses)". While the gerund is not (yet?) licenced by *swear*, it would however seem that the infinitives are becoming rarer. The share of *that* clauses has also fallen since the 18th century and in this respect the data supports the trend mentioned by Rohdenburg (2006, 143).

The occurrences of *to* infinitives per million words chronologically are 4.6, 3.2, and 1.5 and their relative shares of all complements in the same order are 6.2, 7.0 and 2.6 per cent. As was previously mentioned, the occurrences in Part 1 were to a large extent from the same text, which renders the analysis difficult. What remains clear, however, is the low share of *to* infinitives in the BNC. Here is an authentic example of *to* infinitives (5):

(5) I had sworn never to call her aunt again --- (FR6 1496)

An interesting observation regarding the tokens of *swear* complemented by *to* infinitives in the BNC is that each case has a distinctly negative feel. While 2 out of 6 tokens are grammatically negative, the other 4 make promises in a very negative field: swearing to bury someone (HH1 6131) and swearing to avoid women (HA5 1898), to name but a few. This phenomenon did not occur in either of the older sets of data. Few of the older tokens of *to* infinitives were grammatically negative. Semantically more noteworthy in the older data was the tendency of *to* infinitives and NP complements of express fairly grandiose promises to an authority (see subsection 5.1.2).

This negative tendency of the *to* infinitives in the BNC merits more investigation. A further look into the entire Imaginative Prose section of the BNC reveals that this observation is merely a coincidence. A search string {swear}_V* * to VVI (any inflected form of *swear* followed by any other word i.e. a wildcard followed by *to* and the infinitive form of any verb) yields 96 hits of which 87 were relevant. Of these 87 tokens, 15 were grammatically negative. Of the remaining tokens, 11 were semantically negative, such as *kill* or *destroy.* The remaining 61 tokens were either positive or neutral verbs, such as *love* or *keep.* Thus one can observe that a sample of corpus data may not tell the whole truth.

The numerous *that* clauses complementing sense (2) of *swear* show, again, that a large majority of *that* clauses have the same subject for the main verb and the lower verb. Thus, these constructions with *that* clauses could be replaced by *to* infinitives. For example the sentence (6)

(6) --- they'd sworn they'd never let him back in! (HTT 1598)

could just as well be as in (7):

(7) --- they'd sworn never to let him back in.

There were altogether 28 *that* clauses complementing *swear* in sense (2) in the BNC (see section 7.3 table 7.2). Of these 28 cases 24, or 86 per cent, had the same subject in the higher and lower clauses. Why these were not *to* infinitives will be analysed more closely in chapter 8.

However, what was common to *to* infinitives in all three sets of data was tense. The matrix verb *swear* is rarely in the present tense when complemented by *to* infinitives. In Part 1, 3 out of 16 tokens were present tense, in Part 3 only 4 out of 22 and in the BNC none were in present tense. Thus, there seems to be a myriad of issues that revolve around the *to* infinitive complement (see also chapter 8 on Complexity Principle).

7.2. Non-sentential complements

The zero complement is the most common non-sentential complement. It is also the most common of all complements, not considering all *that* clauses as a group. The zero complement is also the only non-sentential complement which has grown its share throughout the timespan of this thesis. Both the NP and the PP complements have had a fluctuating share.

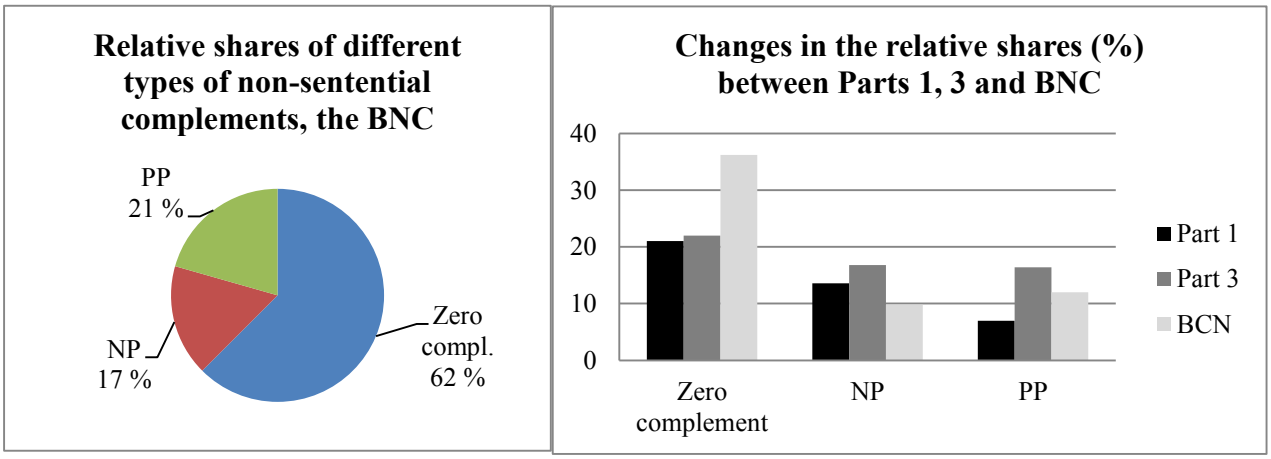

Figure 7.3 Shares of non-sentential complements; the changes between Parts 1, 3 and the BNC

7.2.1. The zero complement

The top five complements included three non-sentential complements. The zero complement is here, too, the most commonly occurring complement. Its normalized frequency is 20.6 when it was 15.6 in Part 1 and 10 in Part 3. The relative share of zero complements in the BNC data is 36 per cent. In Parts 1 and 3 the relative shares were 21 and 22. Thus it would seem that the tendency mentioned in subsection 6.2.1, the decrease of zero complements, was not a continuing trend. In fact, the zero complement has become quite remarkably more common in the latter part of the 20th century. Here is an example of the zero complement (8):

(8) --- she had never heard him swear before. (FNW 3166)

As was the case with Parts 1 and 3, also the BNC data includes zero complements that can be analysed as parentheticals. To recap, parentheticals are constructions where reported speech precedes a reporting frame with the verb *swear* and where the preceding speech could be seen as a preposed sentential complement clause. However, following the analysis in Huddleston and Pullum (2002, 1024, cf. 5.2.1) these constructions will be dealt with as special parenthetical constructions under zero complements. Of all 85 tokens of zero complements, 67 were cases of sense (1), "to use rude language", with which the parenthetical complement is not possible. Of the remaining 18 zero complements occurring with senses (2) and (3), 10 were parentheticals. The percentage of parentheticals out of zero complements for senses (2) and (3) was 30 in Part 1, 45 in Part 3 and 56 in the BNC. Hence it would seem that this use is becoming more common. Example (9) illustrates a parenthetical with sense (3) in the BNC data:

(9) That is all, I swear! (H98 2186)

7.2.2. The NP complement

NP complements included sentences such as (10):

(10)--- but he swore vengeance three years ago ---- (HH1 5614)

The occurrence of the NP as a complement of *swear* has continued to diminish as measured by normalized frequencies. While it has held its place in the top three in the overall complement tables, its frequency has declined from 10.1 in Part 1 to 7.6 in Part 3 and further to 5.6 in the BNC. The division of NP complements into nominal and pronominal is, again, valid. In the BNC data, sense (3) takes pronominal NPs only, while in the earlier sets of data sense (3) did occasionally occur with nominal NPs, as well. Sense (3) with an NP complement is found, for example, in (11):

(11) 'Isn't that the classic white lie?'
'Not in my case, I swear it.' (JYB 4117)

Sense (2), however, still occurs with both types of NP, albeit much more seldom with the pronominal type (12). The earlier example (10) demonstrates a nominal NP complement for sense (2).

(12) ' --- promise me that you'll visit him often ---'
'I promise.'
'Swear it on our mother's memory.' (CB5 969)

One point of interest with NP complements was the few possibilities for [+HUMAN] noun phrase complements. As a reminder, the following three points illustrate the cases which are considered here, based on the analysis in the *OED*, presented in Table 2.1:

1. Point 10d: *the priest swears the soldier by a most solemn oath, not to injure him*.
2. Point 11 *the jury were sworn.* If this passive is put into active, the object is *jury*, a [+HUMAN] group noun.
3. Construction *swear*, [--- NP + *to* + NP], in which the latter NP tends to be *secrecy.*

No tokens of the first construction occurred in the oldest set of data. Part 3 analysis (cf. subsection 6.2.2) presented one token where the NP complement was [+HUMAN] and the concept of Construction Grammar was introduced in order to better understand the construct. Only one such token was found in the BNC, hence this construction cannot be deemed typical for *swear*. The token in the BNC is as in (13):

(13) --- we had risen with the lark and to this day she will swear us both drowned (FBG 1811)

This token represents sense (3), as it is an attesting of truth of a statement. In the framework of Construction Grammar, (13) can be analysed as "she committed herself to the truth of us being drowned by the means of swearing".

The second possibility for [+HUMAN] NP complements is what in this thesis is called sense (5). It had a normalized frequency of 1.7 in Part 1, 0.16 in Part 3 and 0 in the BNC. This sense does not, however, seem old fashioned and its rarity is odd. A further look into the dictionaries shows that this sense in contemporary use is most often expressed in a phrasal verb: *swear into* + NP, as in (14):

(14) The new prime minister was sworn into office (*OALD*)

The third option *swear,* [--- NP *to secrecy*] also has no occurrences in the BNC data. Thus, considering the low frequencies of all these constructions, one might be inclined to think that there is a growing reluctance to have [+HUMAN] NPs complementing *swear*.

7.2.3. The PP complements

PP complements, the last group of complements to be dealt with, had a frequency of 6.8 with 28 tokens. Only simple PPs, not ones preceding *that* clauses, have been considered here. The frequency is slightly lower than the one in Part 3 (7.4) but it has remained higher than in Part 1 (5.2). For the first time, it was the [--- *at* +NP] (15) which had the highest frequency, and its frequency is higher than any other PP complements' in any set of data. It has even surpassed the simple *that* clause with retained complementizers. This can be accounted for by the fact that sense (1) has become much more common in the late 20th century data (see section 7.3). Again, no figurative uses of *swear at* were found.

(15) But he greeted me by swearing at me --- (GWH 572)

In Part 3, the [--- *to* + NP] complement had a higher frequency than in Part 1, a feature that few other complements shared in Part 3 where the overall frequency of *swear* was lower. This trend has not continued and the frequency of [--- *to* + NP] has declined. An example of this PP expressing

an assurance of truth is seen in (16), there were no tokens of the PP expressing the recipient without any sentential complements to follow.

(16) 'Will you swear to this?' (A0N 772)

When it comes to *by* and *on* the picture has somewhat changed. Only *on* has the intensifying function (17) in the BNC when it is not followed by a *that* clause. When occurring by itself, *by* has only one meaning in this data: "to accept as an infallible authority" (18).

(17) 'So do I also swear on my honour.' (CM4 2084)
(18) After all, Great-Grandmother swore by the British or the English, angrez, as she called them. (A0U 1922)

7.3. Complementation and sense

This section relates the complementation to the senses; the results are shown in table 7.2. In the BNC, no tokens of senses (4) and (5) were found. This is to some extent surprising considering that the *OALD*, for example, lists both of them as idioms or special uses of the verb, not subcategories of the main senses. As the dictionary is aimed for language learners, one would expect find more of the idioms it mentions in actual language use.

Table 7.2. Number of complements per sense.

Complement	**Sense 1**		**Sense 2**		**Sense 3**	
	Number	**NF**	**Number**	**NF**	**Number**	**NF**
Zero complement	67	16.2	5	1.2	13	3.2
that clause	0		3	0.7	14	3.4
that clause with Ø complementizer	0		17	4.1	39	9.5
to + NP + *that* clause with Ø compl.	0		7	1.7	3	0.7
to + NP + *that* clause	0		3	0.7	3	0.7
to infinitive	0		6	1.5	0	
NP	0		12	2.9	11	2.7
at + NP	16	3.9	0		0	
by + NP	0		0		3	0.7
by + NP + *that* clause	0		1	0.24	0	
on + NP	0		0		3	0.7
on + NP +*that* clause	0		1	0.24	0	
on + NP + *that* cl. with Ø compl.	0		0		1	0.24
to + NP	0		0		6	1.5
SUM	**83**	**20.1**	**55**	**13.3**	**96**	**23.3**

The frequency of sense (1), "to use rude or offensive language", is the most prominent change. While its frequency was under 10 occurrences per million words in both of the earlier sets of data, it now reaches 20. The percentage of tokens of sense (1) with a zero complement is 80, lower than in Part 1 (89) but again higher than in Part 3 (75). No clear trend thus exists when it comes to expressing the "target" of the bad language, but the sense itself seems much common in the late 20th century English than it did earlier.

Sense (2), "to make a serious promise to do something or to promise to observe or perform", has become slightly less common with 13.3 occurrences in million words (28.3 and 14.7 in the earlier sets of data). It is difficult to tell whether the change has taken place in the period between Parts 1 and 3 (i.e. 1780-1850) because the frequencies of most senses and complements are lower in Part 3 than in Part 1 as the overall frequency of *swear* is lower in the former. What remains clear, however, is that sense (2) has become rarer. As complements it prefers the NP complement and the *that* clause with omitted complementizers. As regards the latter, it seems that its much declined frequency in Part

3 was just an anomaly, as it has for the first time become the most common complement for sense (2) in the BNC. The zero complement has also gained some ground as compared with the other sets of data, while the *to* infinitive is seldom used in the most modern data.

Sense (3), "to promise that you are telling the truth", remains the most common sense for the verb *swear*. It was, however, clearly the most common in Part 1 and since that its frequency has lingered around 20 instances per million words. Very little has changed when it comes to its complementation, although some complements with a lower frequency in Part 3 than in Part 1 have regained some of their potency, for example, the zero complement and the NP complement. In the BNC the most common complement for sense (3) is the *that* clause without the complementizer.

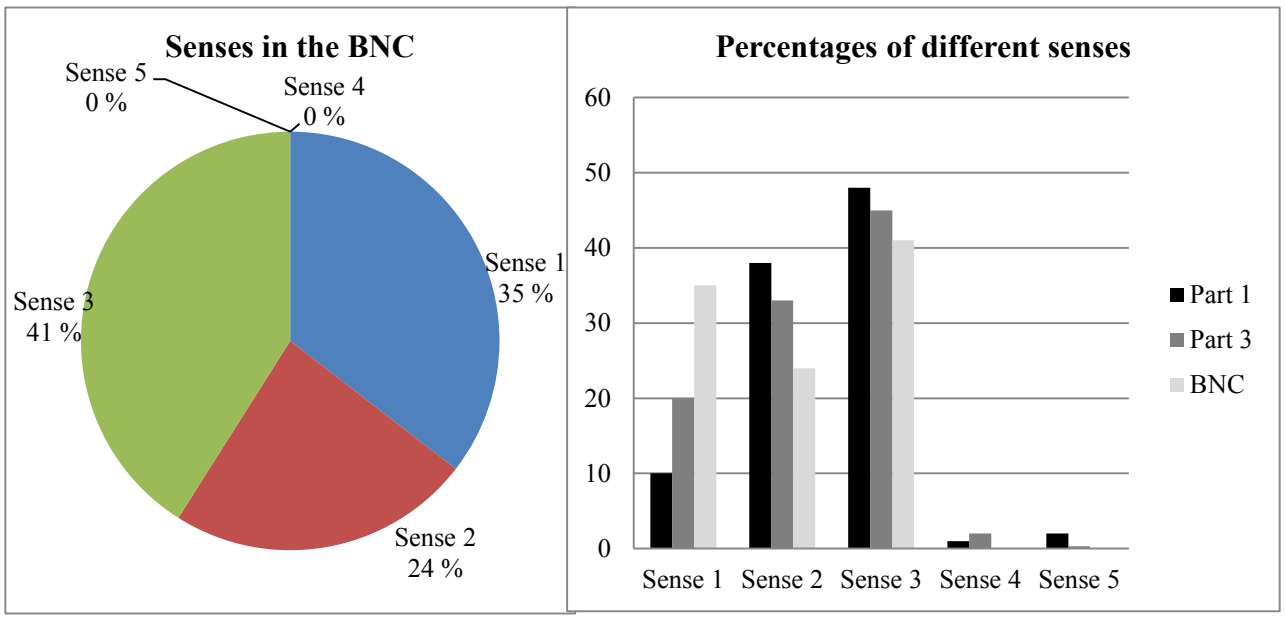

Figure 7.4 Percentages of senses and the changes as compared with Parts 1 and 3

8. Evidence of the Complexity Principle in the data

This chapter will deal with the sentential complements and the effect of the Complexity Principle on the forms they take. The focus is on the choice between the finite and the nonfinite sentential complement as well as the various cases of *that* clause complements with insertions preceding them.

8.1. The choice between finite and nonfinite complement clauses

Chapters 5 to 7 exhibited fairly remarkable differences between the relative shares of different sentential complements. The percentages of *to* infinitives out of all complements were 7, 8 and 3 in Parts 1, 3 and the BNC, respectively. The corresponding numbers for *that* clauses were 45, 31 and 31 per cent, if PP + *that* clause combinations are disregarded. If all *that* clauses are considered, their relatives shares in Parts 1, 3 and the BNC amount to 51, 36 and 39 per cent.

The choice between *that* clauses and *to* infinitives is available only with sense (2), "to make a serious promise to do something; to promise to perform or observe something". A further look into the numerous *that* clauses complementing sense (2) in all three sets of data shows that the majority of *that* clauses have the same subject for the main verb *swear* and for the lower verb in the *that* clause. Thus, these constructions with *that* clauses could be replaced by *to* infinitives. For example the sentence (1) taken from Part 1 of CLMET

> (1) --- he had so often before sworn that he would hang him --- (David 1773-4, *An historical account of all the voyages round the world, performed by English navigators*)

could just as well be as in (2):

> (2) He had so often before sworn to hang him.

As the sense itself is a forward-looking promise and the *to* infinitive has the meaning of a future commitment, one would expect to find sense (2) more often complemented by *to* infinitives.

There seem to be some reasons as to why these tokens were not *to* infinitives. For example, many *that* clauses include modal verbs, which add meaning to the lower clause. This added meaning could not be conveyed with the *to* infinitive construction, as in (3):

> (3) --- and swore he should not budge an inch farther --- (Smollett 1751, *The adventures of Peregrine Pickle*)

In (3), the sentence is an indirect report of an equivalent direct speech (4):

> (4) "I shall not budge an inch farther!" (he swore).

The choice of using a *that* clause instead of *to* infinitive allows the writer to retain the modal auxiliary and thus the meaning it adds to the message. Huddleston and Pullum (2002, 1211) discuss the choice between finite (*that* clause) and non-finite (*to* infinitive) complements and mention that meanings expressed explicitly in *that* clauses must be derived from the context if a non-finite construction is chosen instead. As there are no tense inflections with non-finite clauses, there are no opportunities for including modals (ibid.). Thus opting for a finite complement clause can lead to a more explicit meaning and in these data this option seems to have been much liked by authors.

In addition, some of the lower *that* clauses include adjuncts, which also add something to the whole sentence. This can be seen in, for example (5):

> (5) --- I swear, That while in the country you tarry, I may laugh, jest, or sing (Walpole 1764, *The castle of Otranto*)

In this case, the adjunct clause *while in the country you tarry* splits the *that* clause into to two parts. Turning this construction into a *to* infinitive (6) would move the adjunct *while in the country you tarry* to the end changing the sentence stylistically when it comes to word order and also, the modal *may* would disappear:

> (6) I swear to laugh, jest, or sing while in the country you tarry.

As mentioned in subsection 3.2.1, Rohdenburg (1996, 166-7) writes in his work on the Complexity Principle that any adverbial insertion between the superordinate and the subordinate

clause is likely to trigger the more explicit variant, in this case the finite clause instead of the non-finite infinitive. Rohdenburg's (1996, 1666-7) own work on G.B. Shaw's plays suggests that the finite forms are much less common than the non-finite ones if such complexity factors are not present, whereas in the cases with adverbial insertions the finite forms account for a 100 per cent of the cases.

There were some tokens of *to* infinitives which did not follow this pattern, although the preceding have showed a strong tendency to follow Complexity Principle in the choice between finite and non-finite complements. In Part 1 data, example (7) serves as counter-evidence to the Principle, as the adverbial insertion has not triggered the use of the more explicit, finite clause:

> (7) --- after having sworn, haply, to devote your whole Life to the service of some Beauty--- (Lennox 1752, *The female Quixote*)

However, this token is only one out of 16 *to* infinitives in Part 1. In Part 3, 2 tokens out of 20 exhibited the same tendencies to resist the Principle and in the BNC one out of 6. Example (8) is from Part 3 and example (9) out of the BNC.

> (8) Then, when his barons complained and frightened him, he swore again to keep them; --- (Yonge 1870, *Young folk's History of England*)
> (9) --- (Swore blind not to touch the telephone) --- (B38 1130)

Extractions, too, may have an effect on the choice between finite and non-finite complements in favour of the non-finite clauses (see section 3.2.1). In these three sets of data, only 10 tokens with extractions out of sentential complements were found. Three out of these 10 were extractions out of *to* infinitives and the 7 other were out of *that* clauses. This finding is not in accordance with the idea that "finite clauses are more difficult to extract out of than non-finite ones" (Rohdenburg 2006, 152). Examples (10) and (11) show extractions out of both types of sentential complements:

> (10) --- but all this I'll swear I did [t] in pure good will--- (Griffith 1771, *The history of Lady Barton*)
> (11) Dover and its castle, the castle which, in some accounts, Harold had sworn to surrender [t] to William --- (Freeman 1888, *William the Conqueror*)

Example (10) is especially intriguing as the extraction is not only out of a finite clause but also it has not triggered the use of the more explicit complement i.e. the retention of the complementizer (see 8.2).

While the current of set of data does not function as proof to the difficulty of extracting out of finite clauses, it does seem to support the Complexity Principle. The tendencies mentioned in Rohdenburg's (1996) work are supported in that the infinitives rarely include any complexity and cases with complexity (adjuncts or even modals) seem to prefer *that* clauses.

8.2. *That* clause complements: with or without *that* complementizer?

As has been noted, the *that* clause is one of the most common complements of *swear* in all three time periods under scrutiny in this thesis. It occurs in many forms: with and without the complementizer *that* and also with preposition phrases or adjuncts preceding it. This section looks into the complex *that* clauses i.e. the ones with an insertion preceding them. The PP insertions are typically non-sentential complements whereas there is quite a range of adjunct insertions varying from one-word adverbs to adverbial clauses.

The Complexity Principle is relevant to investigating *that* clauses as it is these types of inserts that function as discontinuity factors and, as such, are likely to trigger the more explicit complement, i.e. the *that* clause with a retained complementizer. Rohdenburg (1996, 149) mentions discontinuity as a factor which adds to the cognitive complexity of a sentence and, thus, increases the likelihood of the occurrence of explicit complements.

The upper part of table 8.1 shows the raw numbers of occurrences with complexity (insertions) present or absent and in each case the omission or retention of the complementizer. The lower part gives the same information in percentages, i.e. how big a relative share (of all complex *that* clauses) each type of *that* clause has.

Table 8.1 Complexity and the complementizer

Raw nrs.			**Raw nrs.**			**Raw nrs.**		
Part 1	*that* +	*that* -	**Part 3**	*that* +	*that* -	**BNC**	*that* +	*that* -
Complexity +	29	7	Complexity +	19	7	Complexity +	12	13
Complexity -	31	64	Complexity -	28	48	Complexity -	15	52
	%			**%**			**%**	
Part 1	*that* +	*that* -	**Part 3**	*that* +	*that* -	**BNC**	*that* +	*that* -
Complexity +	22	5	Complexity +	19	7	Complexity +	13	14
Complexity -	24	49	Complexity -	26	48	Complexity -	16	57

An overall glance at the table shows that the highest percentage of tokens in all three sets of data is in the bottom right corner: no complexity, no complementizer. This cursory look, then, proves at least the reverse side of the Complexity Principle: noncomplex environments favour less explicit complements. The lowest percentage is found in the top right corner in Parts 1 and 3, thus proving the Principle's main point: when complexity factors are present the use of the less explicit complement becomes rarer. In the BNC, however, the situation is slightly different: the lowest percentage is found in the top left corner with complexity and with retained complementizers. This goes against the grain of the Principle. However, the difference between retaining and omitting the *that* when complexity is present is minimal and not a very substantial find.

To see how substantial the findings are, a statistical Chi square test will be applied. The Chi square test in all simplicity tells one how statistically significant the results are i.e. how strong the correlation between complexity and *that* retention is. The test produces a p value, which represents the possibility of the correlation of the two phenomena being coincidental. When using the raw numbers from the upper part of table 8.1, the test gives a p value of less than 0.0001 in Part 1. Thus, the correlation between complexity and retention of *that* is statistically very significant. The very low p value means that there is only a minimal possibility that the correlation is a coincidence. The p values for Part 3 and the BNC data are 0.0026 and 0.0218, respectively. While the p value is growing

in the newer data, the results are still statistically significant and it be deduced that the correlation between complexity and *that* retention is not coincidental.

Here are some examples from the data, which include interesting combinations of insertions and show both retained and omitted complementizers:

> (12) --- we swear to you, by our holy Prophet, and by the terrible Alha, that if you perform the single Condition we enjoin, we will bury what we know --- (Brooke 1765-70, *The fool of quality*)
> (13) The girl swore to herself angrily that she would not go, no allurement would induce her to go. (Bennett 1908, *The Old Wives' Tale*)
> (14) --- if I find my head in a noose, I swear to God yours will be right there along with it. (HHI 1234)

Let us start the closer examination of table 8.1 in the vertical column *that* +. As can be seen by looking at the percentages in the lower part of the table, retaining the complementizer seems to be equally common with or without complexity, especially so in Part 1 and the BNC data. However, in all three parts, but exceedingly so in the BNC, the share of *that* clauses with retained complementizers is lower than that of the omitted complementizers. It is 46 per cent in Part 1, 45 per cent in Part 3 and only 29 per cent in the BNC. Thus it seems that the omission of the complementizers has become more common.

The interest lies, hence, in omitting the complementizer (the vertical column *that* -). When a complexity factor is present, the share of *that* clauses with omitted complementizers drops quite dramatically. Only 5, 7 and 14 per cent of *that* clauses occur without *that* when complexity is present. In other words, omitting the complementizer is quite rare in discontinuous constructions. In the BNC it is slightly more common to omit the complementizer even in a complex sentence than in the older sets of data.

In constructions with no discontinuity factors (the horizontal column complexity -), omitting the complementizer happens quite often, hence, cognitively noncomplex environments at least trigger the use of the more implicit complement. In each set of data this occurs in at least about a half of the cases, in the BNC even more frequently. Vice versa, when complexity is present (the horizontal

column complexity +), omitting *that* is fairly unlikely, albeit more likely in the most current data. It can be concluded that the data in this thesis would certainly support the Complexity Principle, as far as insertions are concerned.

However, extractions as creators of cognitive complexity do no seem to affect the retention/omission pattern in *that* clauses. In each of the 7 tokens with extractions out of finite clauses, the complementizer has been omitted. One such example was example (10) in section 8.1. As the number of extractions is altogether very low, no major conclusions should be drawn here. Suffice it to say that the data strongly supports the Complexity Principle when the complexity factor is an insertion. Let us next consider whether the nature of the insertion bears on the choice of retaining or omitting the complementizer.

The next table (table 8.2) shows the types of insertions which occur with *that* clauses. The complexity factors have been divided into two groups. The PP group consists of all PP complements which precede *that* clauses, namely PPs headed by *by*, *on* and *to*. The complement PPs precede *that* clauses fairly often, as the PPs headed by *on* and *by* function as intensifiers for the swearing and the PP headed by *to* denotes the recipient thereof. There are, nonetheless, some tokens where the insertion is an adjunct and as such not an obligatory addition to the sentence. These are dealt with in the group named as "other" in table 8.2, which contains only adjunct insertions.

Table 8.2. Complex clauses by type of insertion (raw numbers)

Part 1			**Part 3**			**BNC**		
	***that* +**	***that* -**		***that* +**	***that* -**		***that* +**	***that* -**
Complexity +	**29**	**7**	**Complexity +**	**19**	**7**	**Complexity +**	**12**	**13**
PP	14	1	PP	13	5	PP	8	11
other	15	6	other	6	2	other	4	2
Complexity -	**31**	**64**	**Complexity -**	**28**	**48**	**Complexity -**	**15**	**52**

The numbers of PP + *that* clause combinations show a strong the tendency towards retaining the complementizer in Parts 1 and 3. When a PP precedes the *that* clause, the complementizer is omitted in only 1 of 15 tokens in Part 1 and in 5 cases out of 18 in Part 3. As the situation is reversed in the BNC data, it may suggest a change has taken place. In the BNC, 11 out of 19 tokens have omitted the complementizer even when it is preceded by a PP insertion. Examples of *that* clauses with PP insertions include (15) - (17).

(15) I swear by our Prophet and the God of our Prophet, that I would rather suffer the Gaunch --- (Brooke 1965-1970, *The fool of quality*)
(16) She has sworn to me that she is innocent. (Gissing 1893, *The Odd Women*)
(17) --- I swear on the Bible I've no intention of ravishing you on the kitchen floor before supper --- (JYC 2059)

When the insertion is an adjunct (vertical column 'other'), again, the omission of the complementizer is less frequent than retaining it, also in the BNC. In Part 1, 15 out of 21 tokens have retained the complementizer, in Part 3 6 out of 8 and in the BNC 4 out of 6 have done so. Thus it seems that when the insertion is an adjunct, the Complexity Principle is supported by all sets of data, even the most current one, whereas the PP + *that* clause combinations are less likely to concur with the Principle in the BNC. A further look into tokens where the insertion is an adjunct is of interest.

Tokens with an adjunct insertion are likely to retain the complementizer, as can be seen in table 8.2. In addition, there seems to be a common characteristic for the tokens that have omitted the *that*. In Part 1, 6 out of 21 tokens were cases where the complexity factor was followed by the less explicit complement i.e. which were against the Principle. Of these 6 tokens, 4 were cases of one-word adverbials, such as (18). The remaining 2 tokens were only slightly more complex (see (19)). In Part 3, where 2 tokens out of 8 were cases of omitted complementizers with an adverbial insertion preceding it, this phenomenon was not quite as discernible, however, the omission did usually follow a fairly short insertion (20). In the BNC the same tendency as in Part 1 was, again, present. In the BNC, 2 tokens out of 6 had omitted the complementizer despite complexity: both of these were one-word insertions, as in (21) and (22).

(18) He is exceedingly provoked at your Usage, and swears bloodily he'll seize, and throw you into Gaol --- (Richardson 1689, *Letters written to and for particular friends*).
(19) --- I have heard from the Man, who swore a thousand times he lov'd me --- (Lillo 1693, *Silvia*).
(20) They have sworn ere they met they would fight to the death. ((*Punch*, Vol. 99, 1890).
(21) '--- I swear, Merkut, I never thought to come on you so easily.' (FSE 3902)
(22) C. If fifty people came to me, real honest respectable people, and swore blind you wouldn't escape, I wouldn't trust them. (G07 4347)

It would, thus, seem that the nature of the adjunct insertion also affects the outcome. The adjunct insertion typically triggers the more explicit complement. When it does not do so, it seems to be a short insertion, hence not creating major discontinuity within the sentence. It can be concluded that this is in accordance with the Complexity Principle if one accepts that a short discontinuation does not create a cognitively complex environment.

9. Overview of the findings

In this chapter I try to summarize the findings presented in chapters 5 to 8 and find answers for the research questions in subsection 3.2.2. The first two questions were:

1. What has the complementation pattern of *swear* been like in the time periods in question?
2. What are the major changes in the complementation?

To begin with, *swear* can be complemented by both sentential and non-sentential complements. This point was also mentioned in all the dictionaries consulted for this thesis, whereas the grammars disregarded the non-sentential complements completely. Even combinations of sentential and non-sentential complements occur, a point covered in the learner's dictionaries (*to* + NP + *that* clause combination was mentioned in grammars, too). The results of this thesis show that the viewpoint of the grammarians is much too simplified in the case of *swear*.

Table 9.1 outlines the normalized frequencies and percentage shares of complement types in all three sets of data. The points highlighted with darker grey colour are the most common complements in their respective corpora, whereas the lighter grey highlighting corresponds to the second most common complement type.

Table 9.1 Complement types in the data

	Norm. Fr. per million words | Perc. of all complements					
Complement	**CLMET 3.0 Pt. 1**		**CLMET 3.0 Pt. 3**		**BNC**	
to infinitive	5.2	7	3.5	7.7	1.5	2.6
that clause	13.3	17.9	5.4	11.9	4.6	8.1
that clause with Ø compl.	20.2	27.1	7.9	17.5	13.1	23.1
PP + *that* clause	4.3	5.8	2.9	6.3	4.6	8.1
Zero complement	15.6	21	10	22	20.6	36.2
NP	10.1	13.6	7.6	16.8	5.6	9.8
PP	5.2	7	7.4	16.4	6.8	12
NP + *to* + NP *(secrecy)*	0.6	0.8	0.6	1.4	0	0
TOTAL	**74.6**	**100**	**45.3**	**100**	**56.7**	**100**

When it comes to the changes, it seems that since the mid-19th century (Part 3 and onwards), the zero complement has been the number one complement for *swear*. This development may have been fairly straightforward since it was the second most common complement in the data from the 18th century. The change for the *that* clause with a zero complementizer has been the opposite, it has lost is top position to zero complements but retained its popularity by being the second most common complement in Part 3 and the BNC. The BNC data shows that by the late 20th century, the zero complement and the *that* clause without the complementizer have a combined share of almost 60 per cent. No other complement reaches even a share of 10 per cent.

That clauses with complementizers have become less common between Parts 1 and 3. *To* infinitives have faced the same fate between Part 3 and the BNC. Rohdenburg (2006, 143) and many other writers (e.g. Vosberg 2003) have discussed a significant restructuring of the English system of sentential complementation, with the main focus on the appearance of the gerund. The development of the second non-finite complement option also led to the establishment of a semantic difference between these two options (Vosberg 2003, 306). In many cases the gerund has become more frequent and this has influenced the frequency of *to* infinitives and *that* clauses (Vosberg 2003, 305). This phenomenon is called the Great Complement Shift (Rohdenburg 2006, 143) and it may certainly have an effect on the complementation of *swear*. However, why the share of *that* clauses without the complementizer is still rising, is not explained by the Shift.

The relative share of *that* clauses with PP insertions has risen steadily. The frequency of NPs has done the opposite and its relative share has hit its lowest point in the most current data. There seems to be some fluctuation in the frequency (and share) of PPs, more modern data would be required to see which direction proves permanent.

Figure 9.1 shows the way in which the frequency of each complement type has changed from one set of data to the next.

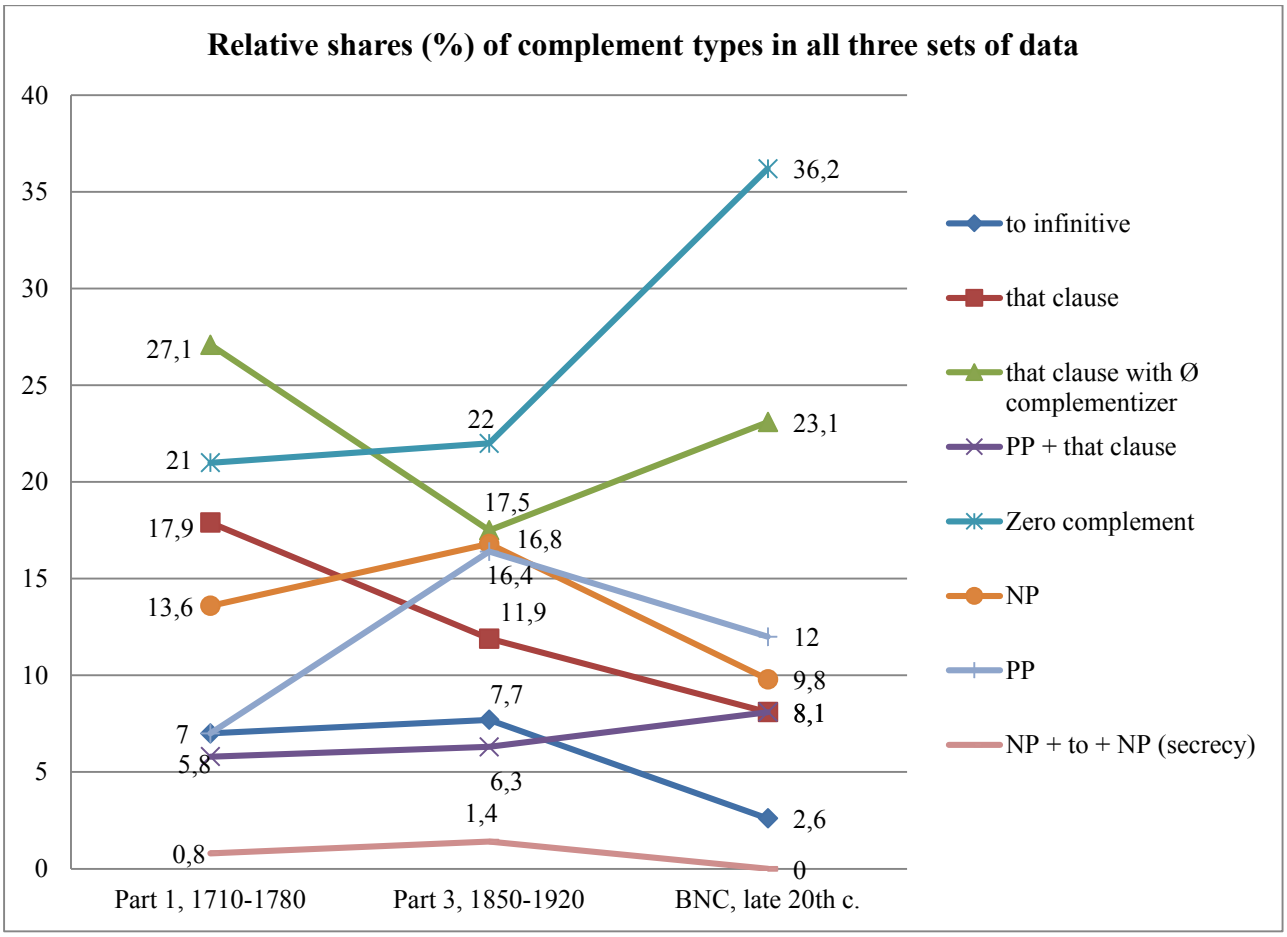

Figure 9.1 Visualization of changes

It seems that only zero complements, *that* clauses with complementizers and PP + *that* clause combinations have undergone a linear change, either increasing or decreasing in their shares. It is, however, the zero complement, which demonstrates the most dramatic change.

Figure 9.2 offers another view on the relative shares and their changes. As the figure shows, the data in Part 3 always sports, apart from the three linear cases mentioned above, either higher or lower numbers than the data preceding and following it. This is peculiar, especially considering that the occurrence of *swear* was altogether much lower in the middle part of the data. It would seem that language use pertaining to *swear* was very different in the mid-period to what it was before and has been since. As a curiosity, the Corpus of Historical American English (COHA) does not have a similar fall in the overall frequency of *swear* between the mid-19th and early 20th century English.

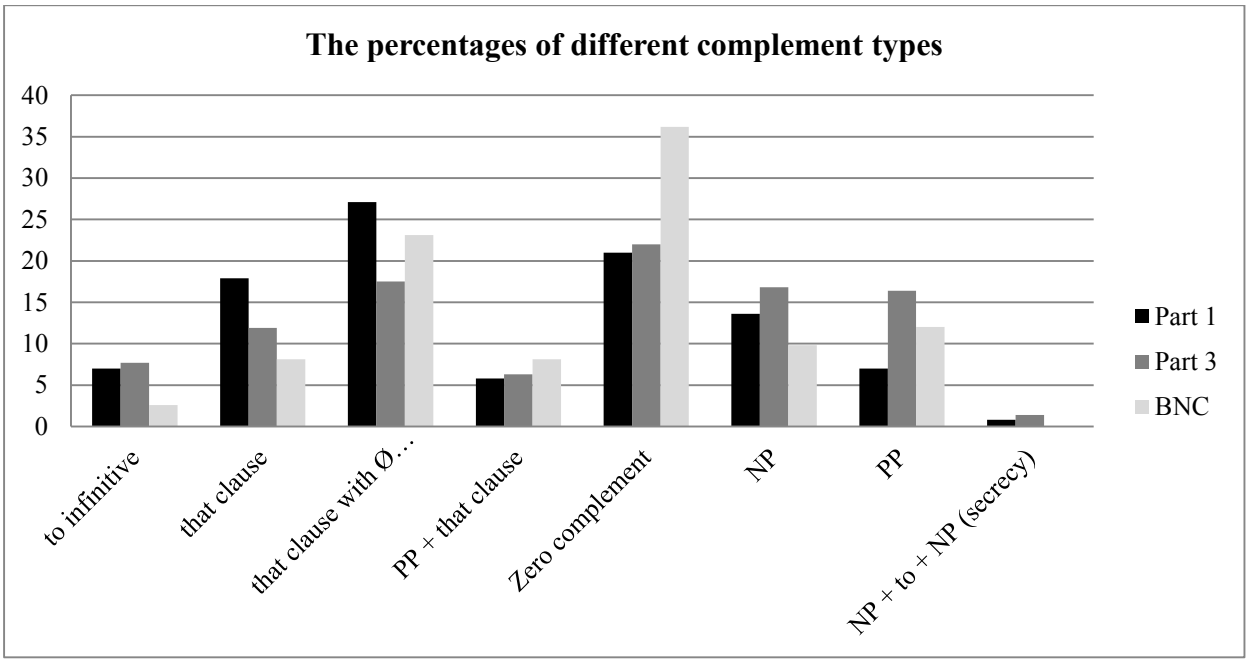

Figure 9.2 Relative shares of complement types

Table 9.2 presents a summary of the frequencies of *swear* and its senses in all three sets of data, figure 9.3 repeats the relative shares of senses, already presented in section 7.3.

Table 9.2 Frequency of *swear* and its senses

	Normalized frequencies per a million words		
	CLMET 3.0 Pt. 1	**CLMET 3.0 Pt. 3**	**BNC**
Sense 1	7.8	9.2	20.1
Sense 2	28.3	14.7	13.3
Sense 3	35.9	20.4	23.3
Sense 4	0.9	0.8	0
Sense 5	1.7	0.16	0
Total	**74.6**	**45.3**	**56.7**

The changes in the frequencies of senses have possibly had an effect on the complementation pattern: the lower frequency of *to* infinitives may have been caused by the decline in the frequency of sense (2), as this sense is the only one which licences the infinitive. However, according to Rohdenburg, (2006, 143) *to* infinitives are becoming rarer in English altogether (the Great Complement Shift), which may affect the results here, too. Additionally, the rising frequency of sense (1) may have resulted in the rise of *swear*, [--- *at* + NP] construction (see 7.2.3.).

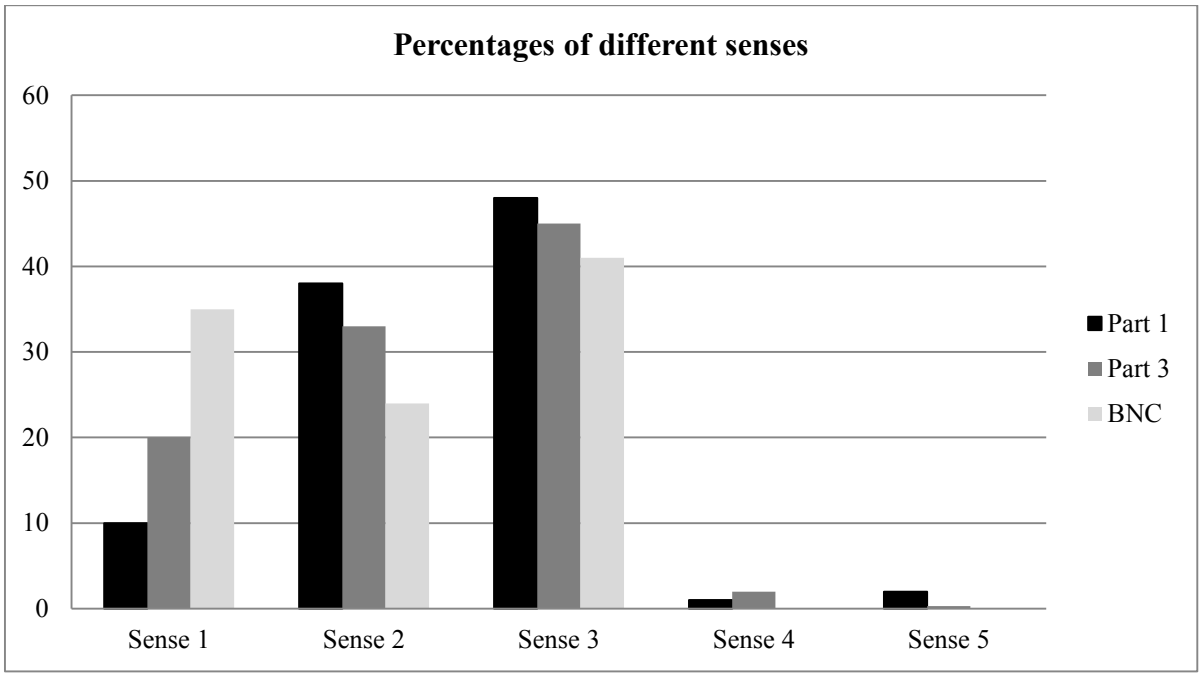

Figure 9.3 Relative shares of senses

The third research question was:

3. Is the complementation sense-related?

While many of the complements were licensed by several senses, some were sense-related. The dictionaries consulted for this thesis did account for the sense in relation to complementation pattern, while the grammars did not. Only the zero complement is licenced by all three main senses (I am disregarding senses (4) and (5) as their frequencies are low, if existent, in all sets of data). *That* clauses, NPs and PPs headed by *by*, *on* and *to* are all licenced by both senses (2), "to promise to perform or observe something", and (3), "to promise that you are telling the truth". The *to* infinite, the PPs headed by *at* and *off* are all sense-specific. Only sense (1), "to use rude or offensive language", allows *at* + NP, only sense (2) allows infinitives and *off* + NP.

Senses (4), "swear someone to secrecy" and (5), "to admit to an office" were mentioned in all dictionaries but their occurrence is rare. This is quite surprising as they were listed in the dictionaries aimed for the use in language learning. As was stated in subsection 7.2.2., it is possible that sense (5) occurs increasingly often in a phrasal combination *swear in/into.*

The fourth research question was the following:

4. Which factors have affected and currently affect the complementation patterns?

The answer to this is not simple. One can, for example, mention general tendencies affecting the language, such as the Great Complement Shift. In the case of *swear*, and specifically its sentential complementation, the Complexity Principle plays a significant role. It affects both the choice between finite and non-finite complement clauses and the explicitness of the finite *that* clauses. In the first case, the Principle seems to override the semantic features which might affect the choice, as well. In the second case, the effect of the Principle on the explicitness of complements is clear, while it seems to be waning, but this tendency can only be confirmed when more current data becomes available.

10. Conclusion

This thesis has shown that the verb *swear* is in many ways more complicated than one might assume. It has many senses which are not all retrievable from the others, especially as many include also figurative subsenses. *Swear* also occurs in preposition-verb combinations, thus adding to the senses. The main three senses can be seen as "using rude language", "promising to do or observe something" and "promising that you are telling the truth". Of these main senses the first is much more common in current use than it was in the 18th and mid-19th centuries.

The complementation patterns are also numerous. Both *that* clauses and *to* infinitives occur as sentential complements for *swear*. There is, however, a current trend in English language of falling frequencies of the previously mentioned complements. In the case of *swear*, this trend seems to have the most notable effect on the infinitive. In the late 20th century, *that* clauses as a group are still, by a small margin, the most common complement for *swear*. The future will show if the gerund, which is rising in frequency as the other two sentential complements become rarer, will also be licenced by *swear*.

There is also a wide variety of non-sentential complements available for *swear*. The zero complement is a very common complement in the late 20th century. It is still second to *that* clauses if they are counted as one group instead of classifying them further but the zero complement shows quite a remarkable rise in frequency. It remains to be seen if the zero complement continues its journey towards the position of the most common complement of *swear*. NPs seem to be becoming rarer as complements for *swear*. The PPs occur by themselves but also increasingly often they combine with *that* clauses creating complex complements.

The complexity of such complement combinations on one hand and the insertion of adjuncts between the superordinate and subordinate clauses on the other influence the complementation pattern. This is especially notable with sentential complementation. The results of this thesis strongly support the Complexity Principle. The notion that grammatical forms carry meaning and thus can add

to the meaning of the lexical item, seems to have less of an effect on the complementation of *swear* than the complexity issue mentioned previously. While some senses of *swear* would match perfectly with certain complements, the results show that they do not co-occur to any remarkable degree. The reasons can be found in the Complexity Principle.

Sense is also a factor in complementation of *swear*. The verb has several senses and some complements are only licenced by a given sense. Such are, for example, the *to* infinitive and the preposition phrases headed by *at*, *off* and *to.* Only the zero complement is licenced by all three main senses, while some complements, notably the NP and the *that* clause are licenced by two of these senses. The changes in the complementation patterns between the early 18th and the late 20th centuries are possibly also affected by the senses. The rising frequency of certain senses has led to the rising frequencies of sense-specific complements. This is especially salient in the frequency of the PP headed by *at*.

The project of investigating the complementation of *swear* has proven to be an interesting one. While more corpora can always be investigated, I feel that this thesis has presented a fairly diverse picture of the sense and complementation of *swear* in British English. Of course, more research remains to be done on other varieties of English. This project also seems to illustrate some general principles and trends in the English language, including the Complexity Principle and the tendency of certain sentential complements to fall in frequency.

The grammars consulted for this thesis gave a much simplified picture of the verb, however, the dictionaries were closer to the truth. The analyses in the dictionaries referred to covered compactly the main points of sense and complementation of the verb *swear* that this thesis also discovered. Thus it can be concluded that learner's dictionaries in general are a good starting point for language learning and teaching.

Works cited

Primary sources:

BNC – The British National Corpus

CLMET – The Corpus of Late Modern English Texts 3.0

Secondary sources:

Biber, Douglas, Susan Conrad and Randi Reppen, eds. 1998. *Corpus linguistics. Investigating language structure and use.* Cambridge: Cambridge University Press.

Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad and Edward Finegan. 1999. *Longman Grammar of Spoken and Written English.* Harlow, Essex: Pearson Education Limited.

Bolinger, Dwight. 1968. "Entailment and the meaning of structures." In *Glossa* 2, 119-127.

Burnard, Lou. 2007. Reference Guide for the British National Corpus (XML Edition). [Internet] Oxford, Oxford University Computing Services. Available from: http://www.natcorp.ox.ac.uk/docs/URG/ [Accessed December 4, 2014]

Burnard, Lou. 2010. British National Corpus. [Internet] Oxford, University of Oxford. Available from: http://www.natcorp.ox.ac.uk/corpus/index.xml [Accessed December 4, 2104]

The *Collins Cobuild Advanced Learner's Dictionary,* online edition. Available from: http://dictionary.reverso.net/english-cobuild/ [Accessed December 3, 2014]

Corpus of Late Modern English Texts, version 3.0. 2011. [Internet] University of Leuven. Available from: https://perswww.kuleuven.be/~u0044428/clmet3_0.htm [Accessed December 4, 2014]

De Smet, Hendrik. 2005. "A Corpus of Late Modern English Texts." In *ICAME Journal* 29, 69-82.

Haegeman, Liliane. 1991. *Introduction to Government and Binding Theory.* Oxford: Basil Blackwell.

Herbst, Thomas, David Heath, Ian F. Roe and Dieter Götz. 2004. *A Valency Dictionary of English. A Corpus-Based Analysis of the Complementation Patterns of English Verbs, Nouns and Adjectives.* Berlin. New York: Mouton de Gruyter.

Huang, James. 1997. *Introduction to Syntax.* Linguistic Institute.

Huddleston, Rodney and Geoffrey K. Pullum, eds. *The Cambridge Grammar of the English Language.* Cambridge: Cambridge University Press.

The *Oxford English Dictionary,* online edition. Available from: http://www.oed.com/ [Accessed September 2013]

Poutsma, H. 1905. *A Grammar of Late Modern English : for the use of continental, especially Dutch, students. Part 1, The sentence*. Groningen : Noordhoff.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech and Jan Svartvik. 1985. *A Comprehensive Grammar of the English Language.* New York: Longman.

Rohdenburg, Günter. 1996. "Cognitive complexity and increased grammatical explicitness in English." *Cognitive Linguistics* 7, 149-182.

Rohdenburg, Günter. 2006. "The Role of Functional Constraints in the Evolution of the English Complementation System." In *Syntax, Style and Grammatical Forms.* Eds. Christiane Dalton-Puffer, Dieter Kastovsky, Nikolaus Ritt and Herbert Schendl. 143-166. Bern: Peter Lang AG.

Rosenbaum, Peter S. 1970. "A Principle Governing Deletion in English Sentential Complementation." In *Readings in English Transformational Grammar.* Eds. Roderick A. Jacobs and Peter S. Rosenbaum. 20-29. Boston: Ginn and Company.

Ross, John Robert. 2002. "Nouniness." In *Fuzzy Grammar.* Ed. Bas Aarts, David Denison, Evelien Keizer and Gergana Popova, 351-422. New York: Oxford University Press Inc.

Sag, Ivan and Carl Pollard. 1991. "An integrated theory of complement control." *Language* 67, 63-113.

Vosberg, Uwe. 2003. "The role of extractions and *horror aequi* in the evolution of *–ing* complements in Modern English." In *Determinants of Grammatical Variation in English*, eds. Günter Rohdenburg and Britta Mondorf 305-327. Berlin. New York: Mouton de Gruyter.

Wasow, Thomas and Thomas Roeper. 1972. "On the Subject of Gerunds." *Foundations of Language* 8, 1: 44-61.

Wehmeier, Sally, ed. 2007. *Oxford Advanced Learner's Dictionary of Current English.* 7th ed. Oxford: Oxford University Press.